COOLPRINT

# Nikon® Full Color Printer User's Guide

Nikon®
ELECTRONIC IMAGING

MP MASTER
MA29619

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# Nikon

## COOLPRINT

User's Guide

## Nikon Inc.

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## Owner's Record

The model and serial numbers are located on the bottom of the unit. Record these numbers in the space provided below. Refer to these numbers whenever you call your Nikon dealer regarding this product.

Model No. NP-10 Serial No._____

LR99778

210046

**WARNING**

**To prevent fire or shock hazard, do not expose the unit to rain or moisture.**

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This Printer is designed to use CARTRIDGES bearing the VP trademark to yield quality prints.
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## Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the space between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

## CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THE POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

**Notice for customers in Canada**

This apparatus complies with the Class B limits for radio noise emissions set out in Radio Interference Regulations.

## CAUTION

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

## ATTENTION

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

# About this manual

This manual is divided into the following 4 chapters and 5 appendices.

### Chapter 1 Introduction

This chapter explains all of the points you should know before operating this unit, such as the supplied accessories, optional accessories and precautions.

### Chapter 2 Connecting Cables

This chapter explains how to connect the power cord and SCSI cable.

### Chapter 3 Loading the VP Print cartridge and VP Print papers

This chapter explains how to load the VP Print cartridge and VP Print papers.

### Chapter 4 Operating the Printer

This chapter explains how to turn electrical power on, how to set the SCSI ID and how to set and modify the number of papers printed.

### Appendix A Installing the SCSI Host Adapter

This appendix explains how to install the SCSI host adapter.

### Appendix B Nikon COOLPRINT Windows Driver Software

This appendix explains how to install and operate the Nikon COOLPRINT Windows Driver Software.

### Appendix C Nikon COOLPRINT Macintosh Driver Software

This appendix explains how to install and operate the Nikon COOLPRINT Macintosh Driver Software.

### Appendix D Troubleshooting

This appendix explains error codes and how to deal with paper jams when the paper-feed cover has been removed.

### Appendix E Specifications

This appendix shows the specifications of this unit.

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# Chapter 1 Introduction

The Nikon COOLPRINT is a full color printer that stores and prints digital data sent from personal computers connected to the COOLPRINT unit by SCSI cables. Please be certain to read this chapter before operating the unit. Before reading this manual, be sure to read OPEN ME FIRST.

## 1.1 Precautions

### On safety

- Operate the printer on AC 100-120V, 50/60Hz, 1.8-1.5A.
- Be careful not to set or drop any heavy objects on the power cord, or to damage the cord in any way. Never operate this printer with a damaged power cord.
- Should any solid object or liquid fall into the printer chassis, unplug the printer and have it checked by qualified service personnel before operating it any further.
- Never disassemble the printer.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- When the printer is not going to be used for an extended period, first disconnect the SCSI cable and then disconnect the power cord from the wall outlet.
- Do not handle the printer roughly.
- To reduce the risk of electric shock, always unplug the printer from the electrical outlet before cleaning and servicing.
- Be certain to install a ground before beginning operation.
- Follow all warnings and instructions marked on the unit.

### On moisture condensation

If the printer is brought directly from a cold location to warm place or placed in an extremely warm or humid room, moisture may condense inside the unit. In such cases the printer will probably not work properly and may even require servicing if you persist in using it. If moisture condensation forms, turn off the power and do not use the printer for at least one hour.

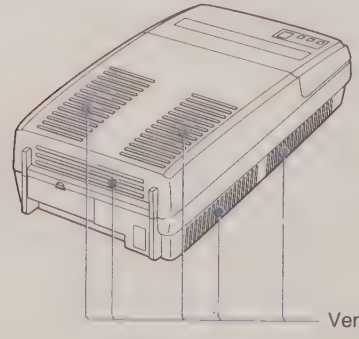
## On cleaning

Clean the case, panel and controls with a soft dry cloth, or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of solvent, such as alcohol or benzine, which may damage the finish.

## On installation

- Avoid placing the unit in a location subject to:
  - vibration
  - high humidity
  - excessive dust
  - direct sunlight
  - extremely high or low temperatures
- Do not use electronic equipment near the unit. The unit will not work properly in electromagnetic fields.
- The unit is designed to operate horizontally. Never attempt to operate the printer in a tilted position.

  If the unit was placed on its side or with its top panel facing down, make sure to remove the paper tray and check that the VP print paper is placed properly before starting operation.
- Do not place heavy objects on the printer.
- Leave enough room around the printer so that the ventilation slots are not blocked. Blocking these slots may cause an internal heat build-up.



## 1.2 System Requirements

Any personal computers connected to the unit must satisfy the following conditions.

### Macintosh

- System 7.1 or higher.
- A ColorSync Extension is required. (Nikon CMM and ColorSync Extension are on the installation disk.)
- 4MB or more RAM are required.
- 40MB or more hard disk capacity.

### IBM PC or compatibles

- MS-DOS version 5.0 or higher.
- Microsoft Windows version 3.1.
- 40MB or more hard disk capacity.
- A SCSI Host Adapter with an ASPI driver must be installed in an expansion slot.

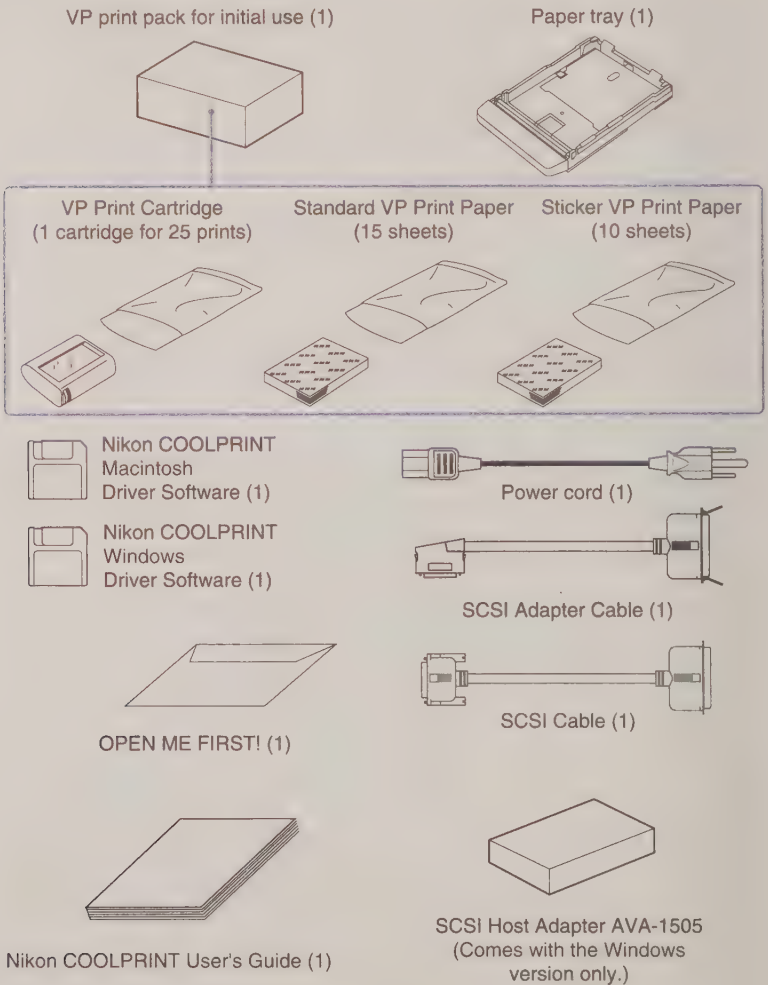
#### Precautions

The unit does not supply Termination Power. For that reason, if the unit is connected to a personal computer that also does not supply Termination Power, it must be connected to a SCSI device that does.

# 1.3 Supplied Accessories and Optional Accessories

## Supplied Accessories

The printer is packed together with following accessories. Check that nothing is missing from your package.



## Optional Accessories

The VP Print Cartridge and the VP Print Paper are not reusable. In addition to standard VP Print Pack, sticker VP Print Pack is available.

- VP Print Pack standard NP-M100

  (One cartridge of ink ribbon for 100 prints and four 25-sheet packs of the standard paper)

- VP Print Pack sticker NP-S050

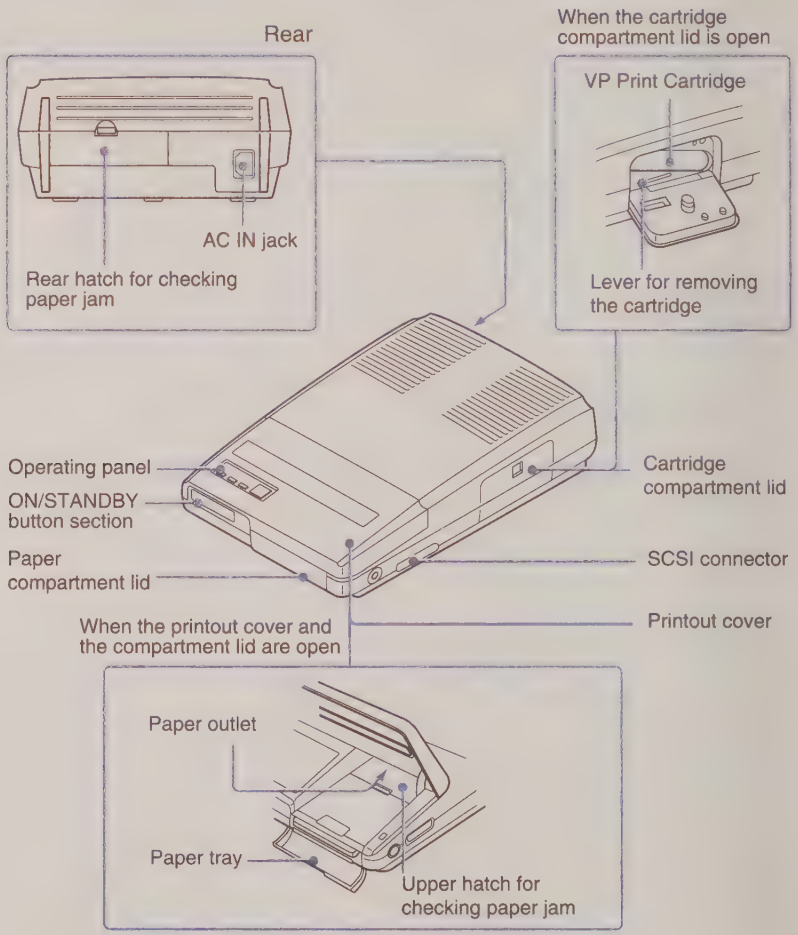
  (One cartridge of ink ribbon for 50 prints and two 25-sheet packs of the sticker paper)

### Notes

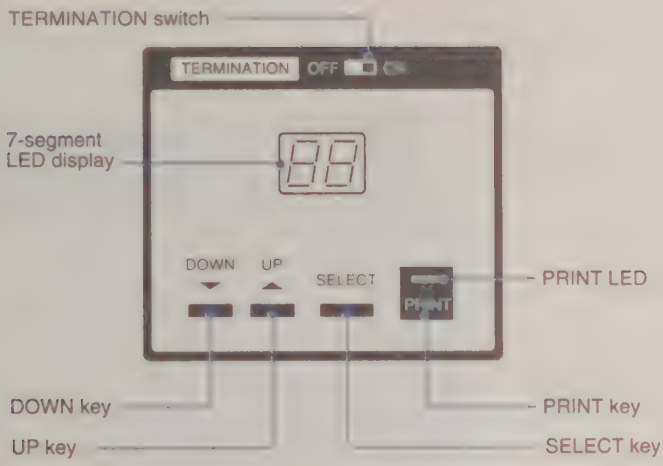
- Use only VP Print Cartridge and VP Print Paper packed in the same carton in order to yield quality prints.
- Retain the bags which contained the paper and the cartridge. Be sure to store partially-used packs of the paper and the cartridge in their original bags.

# 1.4 Location and Function of Parts and Controls

## Main unit



## Operating Panel




### 7-Segment LED display

This displays various unit conditions in two-digit codes. For example, printing quantity mode displays information on the number of copies to be printed. ID mode displays information on SCSI ID. In addition, error codes are also displayed when problems occur.

### Up and Down keys

These keys are used to set the number of copies printed in printing quantity mode and to set the ID number in ID mode.

### SELECT key

This key is used to select both printing quantity mode and ID mode.

### PRINT key

This key is used to start printing by operating the unit directly.

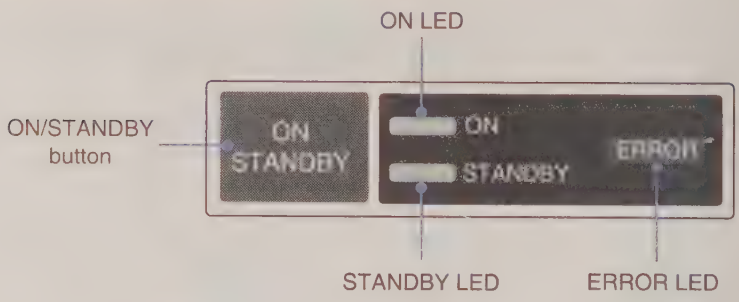
### PRINT LED

The LED is lit when the printer is ready and flashes when the unit is actually printing.

### TERMINATION switch

This switch is used to turn the built-in Terminator on or off.

## On/Standby button section




### ON/STANDBY button

This button is used to change the power standby condition to ON or to STANDBY. Pushing the button alternates the setting between STANDBY and ON.

### ON LED and STANDBY LED

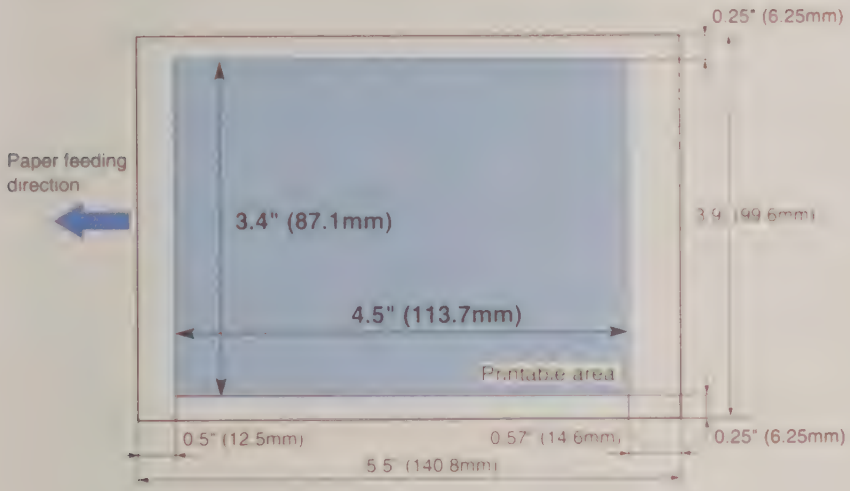
These show the power status. When power is on, the ON LED is lit, and when the power status is STANDBY, the STANDBY LED is lit.

### ERROR LED

When an error occurs, this LED is lit or flashing. When the LED is lit, it indicates that the error cannot be corrected by the user. A flashing display indicates that the error can be fixed by the user.

## 1.5 Printable area

Some areas of VP Print Paper cannot be used for printing. These nonprintable areas are outside the top, bottom, left and right margins as shown below.



# CHAPTER 2 Connecting Cables

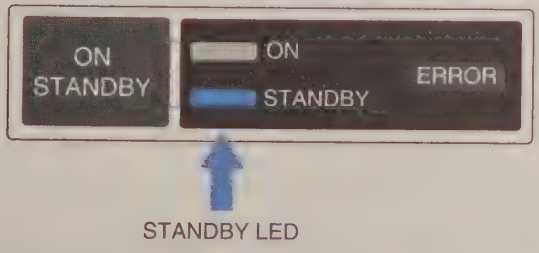
This chapter explains how to connect power cord and SCSI cable.

## 2.1 Connecting the Power Cord

Connect the power cord following the procedure below.

1. **Connect one end of the accessory power cord to the AC IN jack on the back of the unit.**
2. **Connect the other end to the wall outlet.**

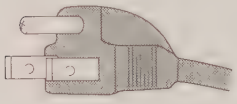
The unit enters the STANDBY mode and the STANDBY LED lights.



## Cautions

Whenever the cord is connected, the printer is powered. When you do not use the unit for a long time, disconnect the SCSI cable and the power cord. Place the unit near the outlet to connect or disconnect the power cord easily.

This plug will only fit into three-wire grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to have a suitable outlet installed.



Do not force the power cord to bend or put heavy things on it because the cord may be damaged and, consequently, may cause a fire or electric shock. If the cord is damaged, replace it with a new one.

## 2.2 Connecting to the Computer

### Precautions

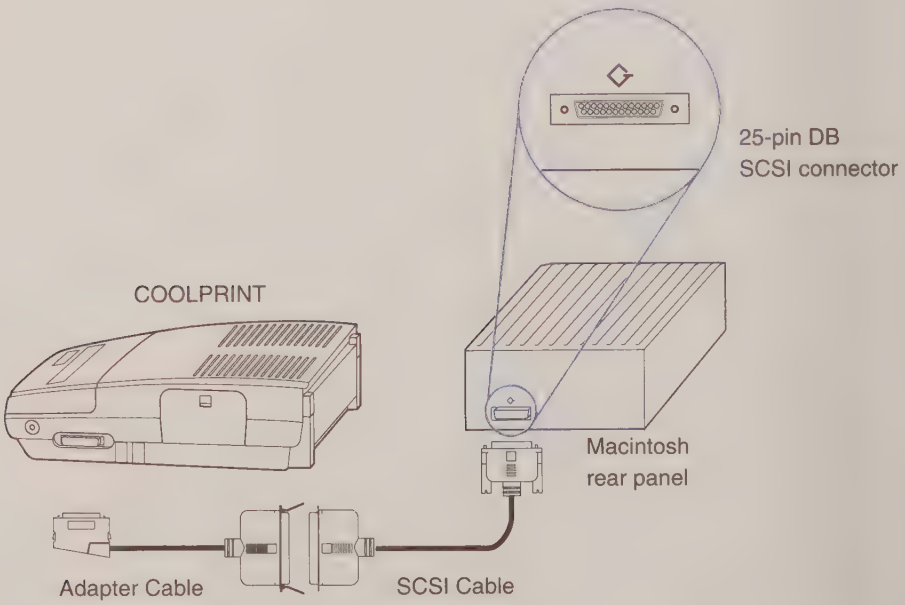
- The unit does not supply Termination Power. For that reason, if the unit is connected to a personal computer that also does not supply Termination Power, it must be connected to a SCSI device that does.
- SCSI cables should never be connected or disconnected while the computer's or SCSI device's power is on. Such action can damage the SCSI Host Adapter on your computer, requiring motherboard replacement.
- When the printer is not going to be used for an extended period, first disconnect the SCSI cable and then disconnect the power cord from the wall outlet.
- When you connect COOLPRINT to IBM PC or compatibles, a SCSI Host Adapter with an ASPI driver must be installed in an expansion slot of the computer.

## Connecting the SCSI Cable

### Macintosh

The SCSI connector for external SCSI devices on the Macintosh computer, which is a 25-pin DB25-type connector, is found on the Macintosh's rear panel. This connector is indicated by the Macintosh's SCSI symbol. The 25-pin SCSI connector is the most common connector used for external SCSI devices on the Macintosh.

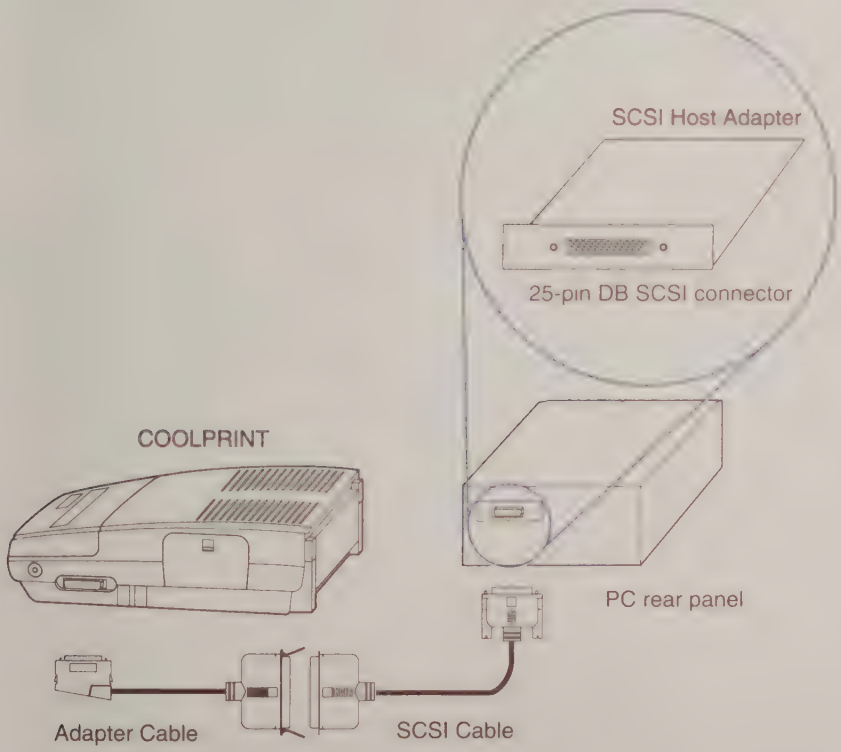
To connect COOLPRINT to a Macintosh computer, insert the SCSI half pitch connector of the accessory adapter cable into the COOLPRINT SCSI connector, the DB25 connector of the accessory SCSI cable into the Macintosh SCSI connector, and interconnect the SCSI full pitch connectors of the both cables. And then turn on the TERMINATION switch on the operating panel.



### IBM PC or Compatibles

To connect COOLPRINT to an IBM PC or compatible, you must install the accessory SCSI host adapter into the computer. Appendix A describes how to install and set the accessory SCSI host adapter. Note that, when another SCSI host adapter has been installed, you must check the settings such as jumper pins.

To connect COOLPRINT to a PC, insert the SCSI half pitch connector of the accessory adapter cable into the COOLPRINT SCSI connector, the DB25 connector of the accessory SCSI cable into the SCSI connector, and interconnect the SCSI full pitch connectors of the both cables. And then turn on the TERMINATION switch on the operating panel.



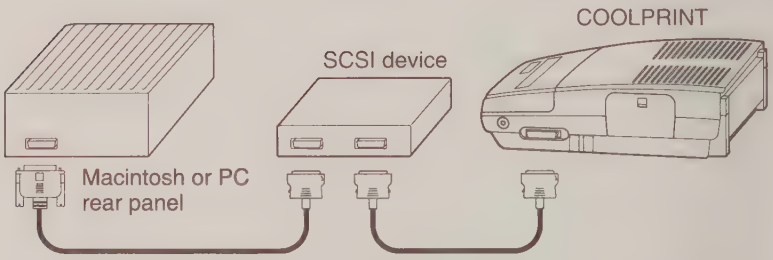
## Setting the SCSI ID

If COOLPRINT is the only external SCSI device that will sit on the SCSI bus, there may be no need to change the SCSI ID number from the factory setting. The default SCSI ID number of COOLPRINT, set at the factory, is ID#2.

If COOLPRINT must share the SCSI bus with one or more other SCSI devices, it is necessary to ensure that no two devices are using the same SCSI ID number. To determine and set the SCSI ID, refer to Section 4.2 "Setting the SCSI ID."

## Connecting Multiple SCSI Devices

In many cases, more than one SCSI device will be connected to the SCSI bus. When this is true, the chain of SCSI cables must connect 'daisy chaining' each device together, even though the devices will typically only communicate directly with the computer, not with each other. Since COOLPRINT has only one SCSI connector, it must be placed at the end of the SCSI chain, and its TERMINATION switch must be turned on. In this case, the accessory cables may not be used.



# CHAPTER 3 Loading the VP Print Cartridge and VP Print Papers

This chapter explains how to load the VP Print Cartridge and VP Print Papers.

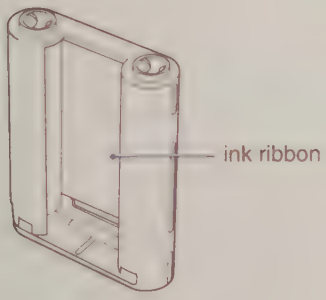
## 3.1 Loading the VP Print Cartridge

Load the VP Print Cartridge with the VP mark according to the following procedures.

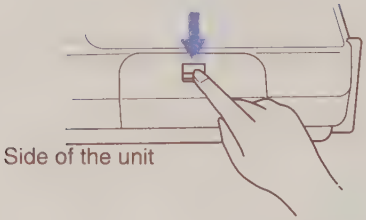
Use only the VP Print Cartridge and the VP Print Paper packed in the same carton.

### Note on handling VP print cartridge

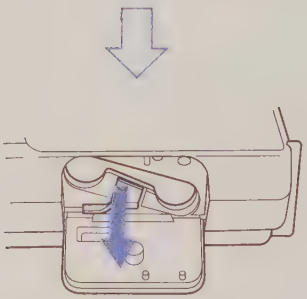
When you put the cartridge down, stand it as illustrated so that dust will not get on the ink ribbon. Do not touch the ink ribbon or place the cartridge in a dusty location. Fingerprints or dust on the ink ribbon may result in flaws on the print.



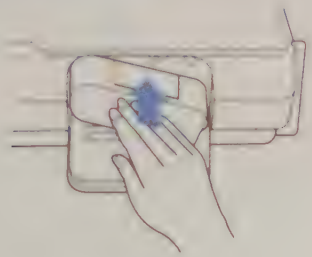
1. Open the cartridge compartment lid.

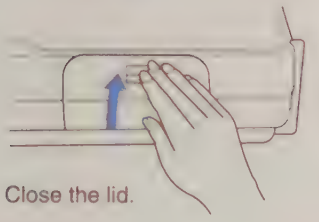



Open the lid while pulling down the tab.



2. Insert the VP print cartridge firmly and close the cartridge compartment lid.





Close the lid.

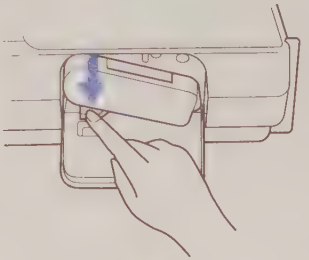
If the ink ribbon of the cartridge is slack, rewind to remove the slack, and then insert the cartridge. If you insert a cartridge with a slack ink ribbon, the ribbon may be damaged.

## If the cartridge compartment lid will not close

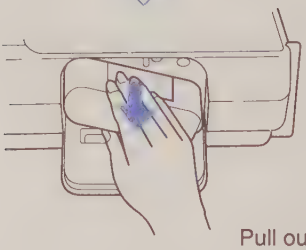
Remove the cartridge, and then reinsert it.

## Replacing the VP print cartridge

You cannot reuse a cartridge which has been completely used. Replace the cartridge with a new one. If a completely used cartridge is still loaded in the unit, the error code "E2" appears on the indicator. Pull down the lever and remove the cartridge as illustrated.



Pull down the lever.



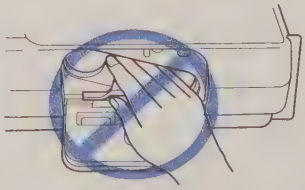
Pull out the cartridge.

### Caution

Never put your hand into the cartridge compartment. The thermal head reaches high temperatures, especially after repeated printing.

### Attention

Ne jamais mettre la main dans le logement de la cartouche. La tête thermique atteint une haule température, surtout aprés impression répétée.

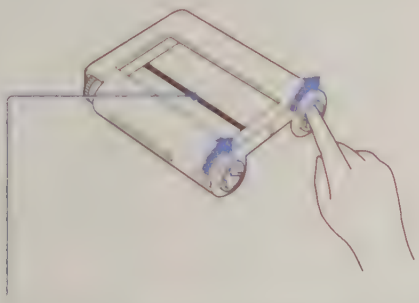


### Notes on storing VP print cartridges

- Avoid placing the cartridge in a location subject to:
  - high temperatures
  - high humidity
  - excessive dust
  - direct sunlight
- When you are going to store a partially-used cartridge for an extended period of time, store it in its original bag.

## When you use a partially-used VP print cartridge

Wind the ink ribbon until the black bar appears on the left. Also, remove any slack.



Wind the spools of the cartridge alternately as illustrated until a black bar extending the full-width of the ribbon appears on the extreme left.

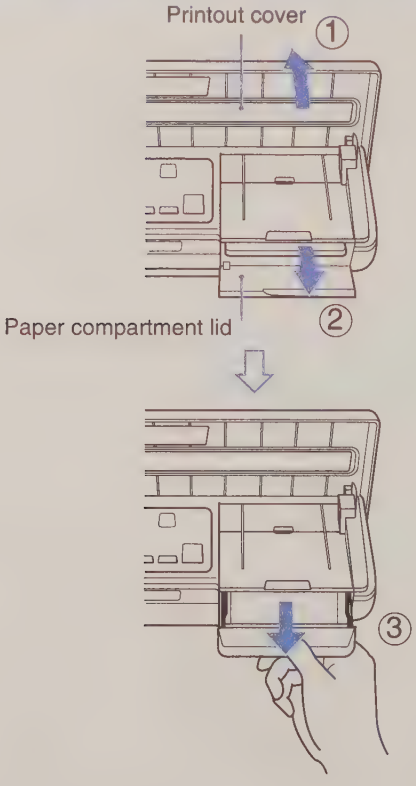
## 3.2 Loading the VP Print Paper

Load the VP print paper according to the following procedures. Use only the VP print paper and the VP print cartridge packed in the same carton.

### Note on handling the VP print paper

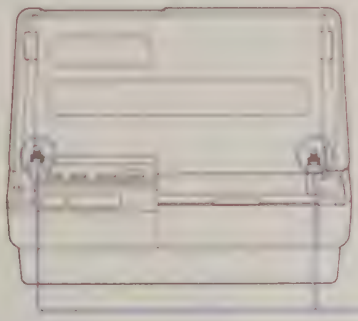
Do not touch the printing surface (the side where nothing is printed). Do not place the VP print paper in a dusty location. Fingerprints or dust on the printing surface may result in imperfect printing. Use the VP print paper recommended for this printer only. If you use a different type of paper, the printer may not print properly or may experience problems.

1. 1 Open the printout cover, 2 open the paper compartment lid and 3 remove the paper tray.



### How to reattach the printout cover

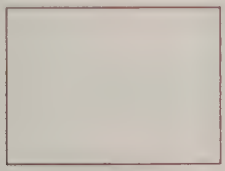
If you open the printout cover forcibly or put force on the hinges, the printout cover may come off from the unit. In this case, fit the two hinges onto the pins from directly above to reattach the cover. (If it is NOT done from directly above or if too much force is put on the hinges, the hinges or the pins may be damaged.)

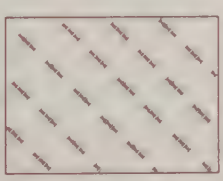



## 2. Insert the VP print paper in the paper tray.

**1. Determine which side is the printing surface.**

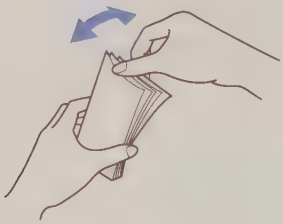
For standard and sticker paper, the printing surface is the shiny side where nothing is printed.


Printing surface


Reverse
(standard paper)

Reverse
(sticker paper)

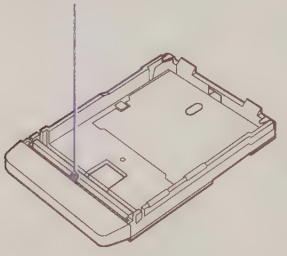
**2. Fan the VP print paper.**



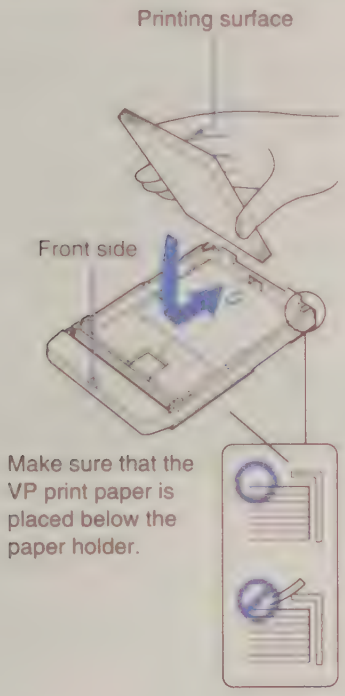
**3. Make sure that the tray spacer is lifted.**

If you insert the standard paper or the sticker paper in the paper tray while the spacer is down and continue operations, paper jams may occur.

For the standard and the sticker paper, keep the spacer raised.



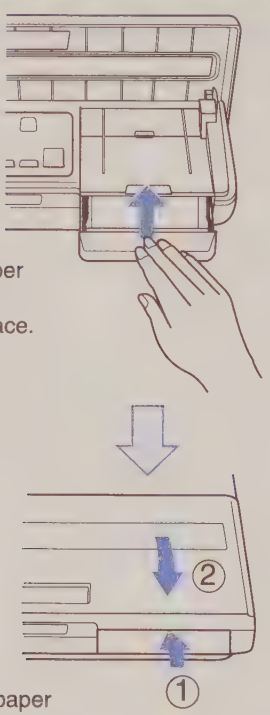
**4. Check that the corners of the VP print paper are not bent, and then place the paper in the paper tray with the printing surface facing up.**




## Notes

- The paper tray holds up to 25 sheets. When you add paper to a partly-full tray, be careful that the total number of sheets does not exceed 25. If you exceed this limit, paper jams may occur.
- Do not place different types or sizes of paper in the tray at the same time. If you do, paper jams may occur.
- After you have carried or stood the printer on its side, check that the VP print paper is placed properly in the paper tray. Then start operation.
- Do not remove or insert the paper tray with the unit standing on one side or the other. If you do, a malfunction may occur.
- Peel off the film of the sticker paper *after* printing. Never peel it off before printing, or it may cause paper jams or other problems.

3. Slide the paper tray back into the printer, close the paper compartment lid, and close the printout cover.




①Close the paper compartment lid first, and then ②close the printout cover

## Notes on storing the VP print paper

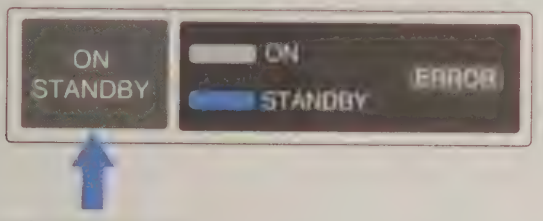
- Avoid placing the paper in a location subject to:
  - high temperatures
  - high humidity
  - excessive dust
  - direct sunlight
- When you are going to store a partially-used pack of the paper for an extended period of time, store it in its original bag.

# CHAPTER 4 Operating the printer

This chapter explains how to turn electrical power on, how to set SCSI ID and how to set and modify the number of papers printed.

## 4.1 Turning On the Power

To turn on the power, connect the power cord and press the ON/STANDBY button after the unit has entered STANDBY mode.




ON/STANDBY button

As soon as the ON LED lights and the STANDBY LED goes out, initialization starts. During initialization, "88" blinks on the 7-segment LED display. The initialization process continues for about 10 seconds. After it ends, "1" appears on the 7-segment LED display. Immediately after initialization, the 7-segment LED display is in printing quantity mode.

## Returning to STANDBY

Pressing the ON/STANDBY button when "ON" is lit causes the unit to enter STANDBY mode, with "ON" going out and "STANDBY" coming on.

In the following cases, the unit will not enter STANDBY mode even if the ON/STANDBY button is pressed.

- During printing
- During consecutive printing
- While reading a bar code after the VP print cartridge has been replaced
- During initialization after the power is turned on

### Caution

Before shifting from STANDBY to ON, wait at least 2 seconds in STANDBY to prevent the unit from malfunctioning.

## 4.2 Setting the SCSI ID

The computer interface used exclusively with COOLPRINT is called a Small Computer System Interface (SCSI - pronounced 'scuzzy'). This interface has been adopted as the standard in the Macintosh and PC computing environment, and is utilized by many computer peripherals including disk drives, scanners, printers and CD-ROM drives.

### Determining the SCSI ID number to use

If COOLPRINT is the only external SCSI device that will sit on the SCSI bus, there may be no need to change the SCSI ID number from the factory setting. The default SCSI ID number of COOLPRINT, set at the factory, is ID#2.

If COOLPRINT must share the SCSI bus with one or more other SCSI devices, it is necessary to ensure that no two devices are using the same SCSI ID number. Create a list of all SCSI ID (See the tables below) on the SCSI bus of the computer you will be installing COOLPRINT on, noting the device type and the SCSI ID number of each device.

#### Macintosh environment

If you will be installing COOLPRINT on the Macintosh computer, you can discover the SCSI ID of some disk drives by selecting the disk drive in the Macintosh Finder and selecting "Get Info" from the File menu. To determine the SCSI ID number of the other devices, look at the rear of each for some indication. If there is no indication as to the SCSI ID number, then consult with the device's user's manual or contact the peripheral manufacturer to ascertain this information.

| SCSI ID | Device type |
|---|---|
| 0 | Internal Disk Drive |
| 1 | |
| 2 | **COOLPRINT** (default) |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | Macintosh Computer |

### PC environment

If you will be installing COOLPRINT on a PC, to determine the SCSI ID number of the other devices, look at the rear of each for some indication. If there is no indication as to the SCSI ID number, then consult with the device's user's manual or contact the peripheral manufacturer to ascertain this information.

| SCSI ID | Device type |
|---|---|
| 0 | Internal Disk Drive |
| 1 | |
| 2 | **COOLPRINT** (default) |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | SCSI Host Adapter |

If another SCSI device shares the same SCSI ID #2 of COOLPRINT, change the SCSI ID number of COOLPRINT to an unused number, as indicated in the following sections.

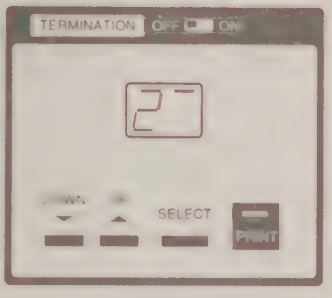
## Setting the SCSI ID number

Set the SCSI ID when ON LED is lit. If ON LED is not lit, make it so by following the steps mentioned in the previous section.

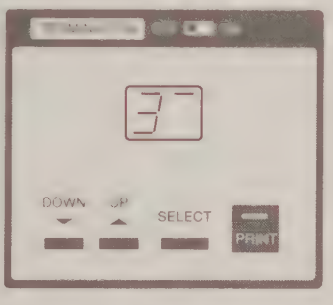
To set the SCSI ID, follow the procedure below:

1. **Press the SELECT key and change from printing quantity mode to ID mode.**

   If this operation is performed for the first time after shipment, "2‾" appears on the 7-segment LED display. This means that the currently set SCSI ID is 2, which is the default at shipment.

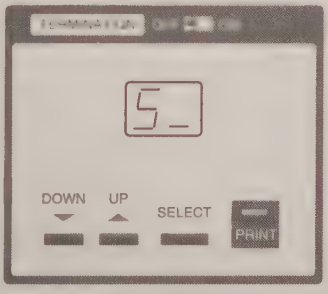



   If the currently set SCSI ID is 3, "3‾" appears on the 7-segment LED display. ("3‾" indicates that ID "3" is set).




2. **Press the UP or DOWN key to display the SCSI ID that you want to set.**

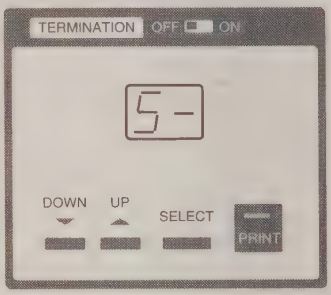
   If you want to set the SCSI ID to "5", press the UP or DOWN key until "5_" appears on the 7-segment LED display. ("5_" indicates that ID "5" is not set).



Pressing the UP or DOWN key causes the 7-segment LED display to cycle through 0 to 7. If one of these keys is held down, the display changes continuously.

3. **When the SCSI ID you want to set is displayed, press the UP and DOWN keys at the same time.**

   "5–" appears on the 7-segment LED display. ("5–" indicates that ID "5" is ready to be set).




4. **Press the ON/STANDBY button to set this unit to STANDBY.**

5. **Press the ON/STANDBY button once again to set this unit to ON.**

You can confirm the currently set SCSI ID even during printing (simply by pressing the SELECT key).

### Caution

Before shifting from STANDBY to ON, wait at least 2 seconds in STANDBY to prevent the unit from malfunctioning.

## 4.3 Reprinting

Because this unit has a built-in full-frame print buffer, the images last sent from a personal computer can be reprinted by directly operating this unit. To send images from the personal computer, refer to the appendices.

Reprint data following the procedure below:

1. **If the 7-segment LED display is not in printing quantity mode, press the SELECT key to shift to printing quantity mode.**

   When the power has just been turned on or printing has finished, "1" appears on the 7-segment LED display.

2. **Press the UP or DOWN key to display the number of copies to be printed.**

   Pressing the UP or DOWN key causes the 7 segment LED display to cycle through 1 to 25. If one of these keys is held down, the display changes continuously.

3. **When the desired number of copies appears on the 7-segment LED display, press the PRINT key.**

   Printing starts. When each copy has been printed, the number on the 7 segment LED display is decreased by one. When all the copies have been printed, the number turns to "0" and then returns to "1".

## 4.4 Changing the Number of Copies during Printing

You can change the number of copies by using the driver software on your personal computer or by changing the setting on this unit after printing has started. To change the number of copies on this unit after printing has started, follow Procedure 2, mentioned in the previous section.

If printing has finished while you are trying to increase the number of copies, follow the procedure mentioned in the previous section.

### Cautions

- If the number of copies is set on this unit before the printing instruction is received from the computer, the setting is ignored by the unit. In such cases, the value set with the driver software on the computer is used.
- If the VP print paper runs out before printing the specified number of copies, printing terminates, with error code "E1" shown on the 7-segment LED display. Supplying the paper afterward prompts the unit to display the number of copies not yet printed. Follow the procedure in the previous section to reprint the image because reprinting does not start automatically.
- If the ink ribbon wears out before printing the specified number of copies, printing terminates, with error code "E2" shown on the 7-segment LED display. Supplying the VP print cartridge afterward prompts the unit to display the number of copies not yet printed. Follow the procedure in the previous section to reprint the image because reprinting does not start automatically.
- It may take time to print the next copy during reprinting or when printing multiple copies of the same image. This happens when the temperature has become so high that the unit has to wait until it is cooled down. In this case, the 7-segment LED display blinks. When the temperature has lowered to a certain point, printing restarts automatically. Note that the 7-segment LED display also blinks if the SELECT key is pressed during printing.
- Do not stack more than 25 sheets of paper on the outlet tray because it may cause a paper jam.
- Printed paper cannot be used for printing.

## 4.5 Notes on Keeping Printed Images

Do not put cellophane tape, or use a plastic eraser containing plasticizing material on printed paper, or the ink will be removed.

Do not drop liquids containing volatile organic solvent, such as alcohol, on the printing surface because the printed image may fade.

Do not leave printings exposed to direct sunlight, high temperature or humidity, or a dusty environment because the color may fade.

# APPENDIX A Installing the SCSI Host Adapter

## FCC Compliance Statement

AVA-1505 AT-to-SCSI Host Adapter has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Move the equipment away from the receiver.
- Plug the equipment into an outlet on a circuit different from that to which the receiver is powered.
- If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

CAUTION : Only equipment certified to comply with Class B (computer, input/output devices, terminals, printers, etc.) should be attached to this equipment, and must have shielded interface cables.

Finally, any change or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the user's authority to operate such equipment.

Each AVA-1505 is equipped with an FCC compliance label which shows only the FCC identification number. The full text of the associated label follows;

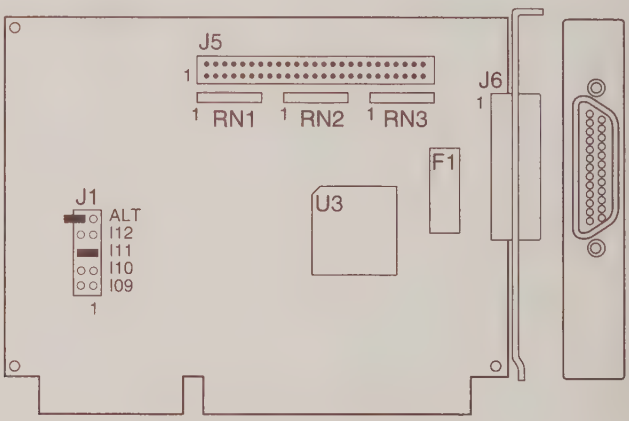
This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions; (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

## A.1 Getting Started

This appendix tells you how to install and configure the AVA-1505 AT-to-SCSI host adapter. Installation instructions are given in Sections A.4 through A.8.

## A.2 SCSI Host Adapter Layout

This figure identifies the major AVA-1505 components, and the table describes each component.




| Location | Description |
|---|---|
| J1 [1] | Jumper Block |
| J5 [1] | 50-pin Internal SCSI Connector |
| J6 [1] | DB25 External SCSI Connector |
| F1 | Fuse |
| RN1, RN2, RN3 [1] | Terminators |
| U3 | AIC-6360 PIO Chip |

[1] Pin 1 is marked by 1 on the board.

## A.3 Default Settings

The AVA-1505 is designed to operate as shipped in most AT-class computers. The default settings are

| Parameter | Default Setting |
|---|---|
| SCSI Disconnection [1] | Enabled |
| SCSI Address [1] | 7 |
| SCSI Parity [1] | Enabled |
| Terminators | Installed |
| Terminator Power | Supplied by host adapter |
| Interrupt Channel [2] | 11 |
| AT Port Address [2] | 340h-35Fh |

[1] These values are set by the software (see Section A.6, Software Installation)

[2] See Section A.8, *Jumper Block Settings*, to learn how to change these settings

## A.4 Installing the Host Adapter

### Setting Jumpers

If you need to change jumper block settings, do it now before you replace the chassis cover. See Section A.8, *Jumper Block Settings*, for details.

In most cases, you do not have to change the default jumper settings. Here are situations in which you should change the settings.

- If another Adaptec SCSI Host Adapter is already installed in your computer, you may need to change the interrupt channel of the AVA-1505. If you change the setting from the default of 11 (pin pair I11) you may also need to change options in the software (see Section A.6, *Software Installation*).
- If you change the default port address by installing the extra jumper on pin pair ALT, you may also need to change options in the software (see Section A.6, *Software Installation*).

### Inserting the Host Adapter

#### WARNING

Turn OFF and disconnect the power to your computer and attached devices before you remove the chassis cover. See your computer's documentation for instructions on how to do this.

1. **Remove the cover of your computer to expose the AT expansion slots.**
2. **Locate an unused AT expansion slot. AT-type slots have two edge connectors (one 62-pin and the other 34-pin) in line with each order.**
3. **Remove the expansion slot cover for this slot.**
4. **Align and insert the host adapter into the AT slot. Use the expansion slot cover screw to secure the host adapter to the frame.**

#### Note

Do not replace the chassis cover or reconnect the power yet!

## A.5 Connecting Peripherals

### Setting SCSI IDs

You must assign a different SCSI ID to each device on the AVA-1505 SCSI bus. See your SCSI peripheral documentation for directions on how to determine the ID and change it. The default SCSI ID for AVA-1505 host adapters is SCSI ID 7.

### Connecting Cables

SCSI devices are cabled together in a single, connected series called the SCSI bus. The SCSI bus cables must run sequentially from one device to the next.

The host adapter is at the end of the SCSI bus if either the internal or the external SCSI connector is unused. The host adapter is in the middle of the bus if internal and external SCSI devices are installed.

### Caution

AVA-1505 host adapters support only single-ended SCSI devices. Differential SCSI devices may be damaged if connected to the host adapter. The peripheral documentation will tell you whether the device is single-ended or differential.

1. **Lay out the cables and find the pin-1 element of each cable and peripheral connector.**

   On internal cables, pin 1 is usually marked with a contrasting color on one edge of the ribbon cable, and a small triangle marks pin 1 on the SCSI connector. External cable connectors can only be plugged-in one way, so pin-1 orientation is automatic.

2. **Attach the SCSI cable to the host adapter, using the external connector.**

3. **Be sure to maintain correct pin-1 orientation throughout the bus.**

   The AVA-1505 uses a 25-pin DB25 external connector (Apple compatible), and a 50-pin flat ribbon-type internal connector.

## Terminating the SCSI Bus Cable

The last physical SCSI device on either end of the SCSI bus must have a set of resistors called terminators. Terminators must be removed from, or disabled on, all other devices on the SCSI bus.

The AVA-1505 and most SCSI peripherals have built-in terminators that can be enabled or disabled. Terminate only the devices at each end of the SCSI bus.

### Terminating the Host Adapter

The three factory-installed terminators on the AVA-1505 host adapter are located below the internal SCSI connector, as shown in the diagram on Section A.2. You must remove these terminators if you attach SCSI devices to both the internal and external SCSI connectors, since the host adapter is then in the middle of the SCSI bus. Terminators are 8-pin 220/330 ohms resistors.

The table below shows how termination should be set for the three possible SCSI device and host adapter configurations.

| Devices Connected to Host Adapter | AVA-1505 Terminators |
|---|---|
| Internal devices only (host adapter at end of bus) | All three installed |
| External devices only (host adapter at end of bus) | All three installed |
| Internal and External devices (host adapter in the middle of bus) | All three removed |

### Terminating SCSI Peripherals

1. **Check the manufacturer's documentation to determine how to enable or disable SCSI bus termination on your SCSI peripheral device.**
2. **Install/enable terminators on SCSI devices at the ends of the SCSI bus (cable).**
3. **Remove/disable terminators on all other devices on the SCSI bus.**
4. **Be sure the SCSI cables are connected securely. They may have been loosened if you changed jumpers settings on the peripherals.**

## Reassembling and Starting the System

1. **Replace the computer chassis cover, following the instructions in your computer's documentation.**
2. **Turn all power switches OFF, then reconnect power cables to your computer.**
3. **Turn ON the power for the peripheral(s) then for the computer.**

In most cases your computer, host adapter, and SCSI peripherals are now ready to use.

## A.6 Software Installation

For installing software, insert the software disk into a floppy disk drive, change to the drive letter of that drive (either A or B), and type install and press Enter. Then follow the instructions onscreen.

Remember the software and hardware settings for interrupt channel and port address must match, see Section A.4, *Installing the Host Adapter*, and Section A.8, *Jumper Block Settings*.

### Note

- You should change the name of the directory to which the software will be installed. When the Installation Subdirectory dialog appears, the default name is "C:\SCSI". Press "Set Location", and type the another name (for example "C:\1505").
- If you change the interrupt channel or the port address jumper setting after installing the software, you may need to reinstall or reconfigure the software.

## A.7 Troubleshooting Checklist

If you have a problem during installation, check these items first:

- Are all SCSI peripheral devices powered? Did you power them before system boot?
- Are all SCSI cables and power cables properly connected?
- Do the host adapter and all devices on the SCSI bus have unique SCSI IDs?
- Are all devices on the SCSI bus terminated properly? (See Section A.5, *Connecting Peripherals*.)
- Do your SCSI devices support parity checking?
- Is the fuse (F1) discolored?
- If your system has multiple host adapters, did you assign each host adapter a unique interrupt channel and port address?

If you need replacement components such as a fuse, jumper shunt, or terminator, see your dealer.

## A.8 Jumper Block Settings

The AVA-1505 jumper block settings are silk-screened on the board and are used to configure user-selectable options. In the diagram on Section A.2, the black bar covering both pins represents an installed jumper. This table below shows all the possible settings for the two jumpers on Jumper block J1. Default settings are marked with and asterisk (*).

| Pin Pair [1] | Interrupt Channel | ALT [2] | PIO Port Address |
|---|---|---|---|
| I09 | 09 [3] | On | 140h-15Fh |
| I10 | 10 | Off | 340h-35Fh* |
| I11 | 11* | On = Jumper | |
| I12 | 12 | Off = No Jumper | |

[1] Place jumper on only one interrupt channel pin pair.

[2] An extra jumper is provided if you want to change the port address.

[3] Not recommended with Windows 3.x.

# APPENDIX B Nikon COOLPRINT Windows Driver Software

Nikon COOLPRINT Windows Driver Software is dedicated to Nikon COOLPRINT.

This driver software can be installed and selected in the same way you install and select other common printer drivers. Before installing it, please make a backup copy of the original disk.

You can print with Nikon COOLPRINT Driver by choosing "Print" command, in the same way you would for other drivers.

### Note

You can only print in the foreground with this driver. After the image is transferred to the printer, the PC will be freed up to continue with other tasks.

## B.1 System Requirements

Your computer must satisfy the following conditions:

- MS-DOS version 5.0 or higher
- Microsoft Windows version 3.1.
- 40MB or more hard disk capacity.
- A SCSI controller card with an ASPI driver must be installed in an expansion slot.

## B.2 Installing the Driver

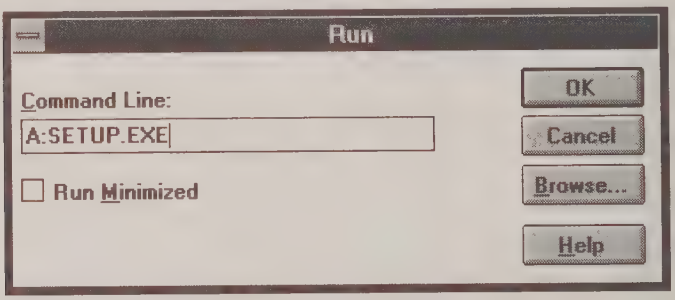
To install COOLPRINT Windows Driver Software, the Installer contained in the distribution disk can either be used or not.

### Installation using the Installer

When using the Installer, install the Driver as follows;

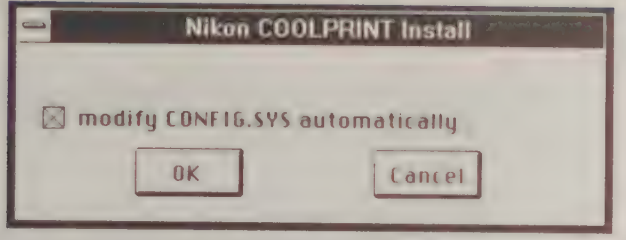
1. **Turn on the power of the computer and activate Microsoft Windows.**
2. **Insert the disk titled "Nikon COOLPRINT™ Windows Driver Software" into the floppy disk drive.**
3. **Open the Program Manager window.**
4. **Pull down the File menu and choose the "Run..." command.**

   The Run window will appear.




If the disk is in the "A" drive, enter "A:SETUP.EXE" into the file name box, then press "OK".

The Nikon COOLPRINT Install window will appear.




This window has a check box. If you don't check the check box and press "OK", you can modify the CONFIG.SYS file manually. If you check the check box and press "OK", the CONFIG.SYS file will be modified automatically.

This window has the following buttons.

OK: Recognizes the Windows Startup Drive and the path automatically, and copies the Drivers into the subdirectory "SYSTEM". Pressing "OK" brings up the another windows. Follow the instructions within them.

Cancel: Cancels the installation and returns to the Program Manager.

## Installation without using the Installer

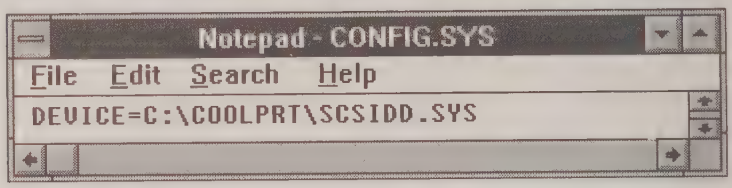
To install without using the Installer, install the Driver as follows:

1. **Turn on the power of the computer.**
2. **Insert the disk titled "Nikon COOLPRINT™ Windows Driver Software" into the floppy disk drive.**
3. **Copy the SCSIDD.SYS file to the Startup disk. (Example: C:\COOLPRT\SCSIDD.SYS).**
4. **Activate Microsoft Windows.**
5. **Open the Accessory Group window and start the Notepad.**
6. **Edit the CONFIG.SYS file.**

### caution

Improperly editing the CONFIG.SYS file may cause your system to operate improperly or fail to boot. Always make a backup copy of the CONFIG.SYS file before editing it.

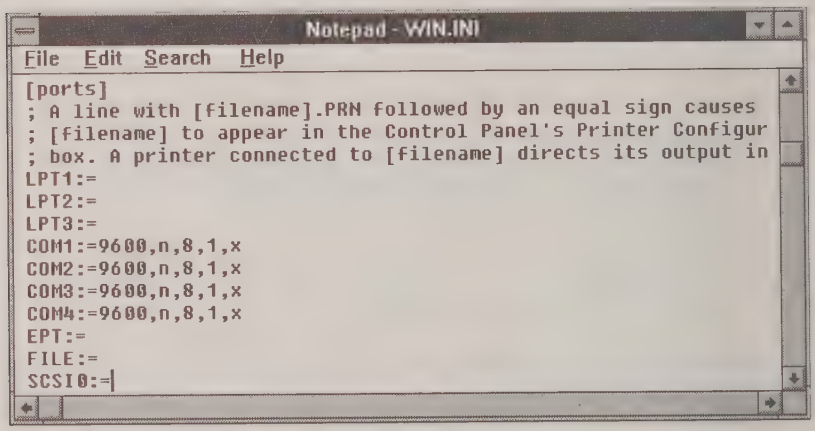
Type "DEVICE=C:\COOLPRT\SCSIDD.SYS" beneath the line for SCSI card's driver.




**7. Save the CONFIG.SYS file.**

**8. Edit the WIN.INI file.**

Search the section of [ports], and type "SCSI0:=" where illustrated below.




**9. Save the WIN.INI file.**

**10. Quit the Notepad.**

At this time, the installation has been completed. Reset the computer.

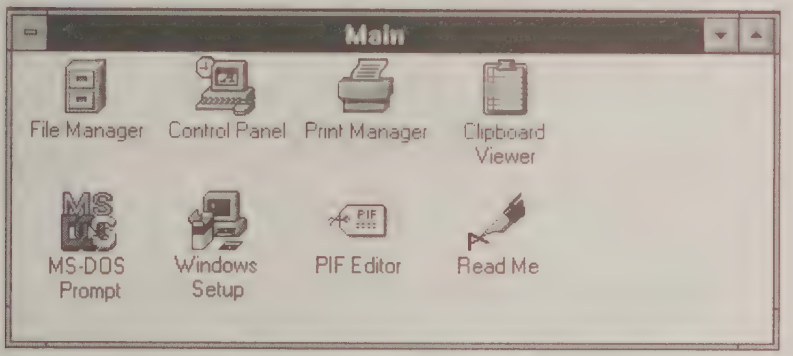
## Installing the printer

Before printing with Nikon COOLPRINT Driver, you have to install a printer from the Printers window.

Follow the steps below to install a printer from the Printer window.

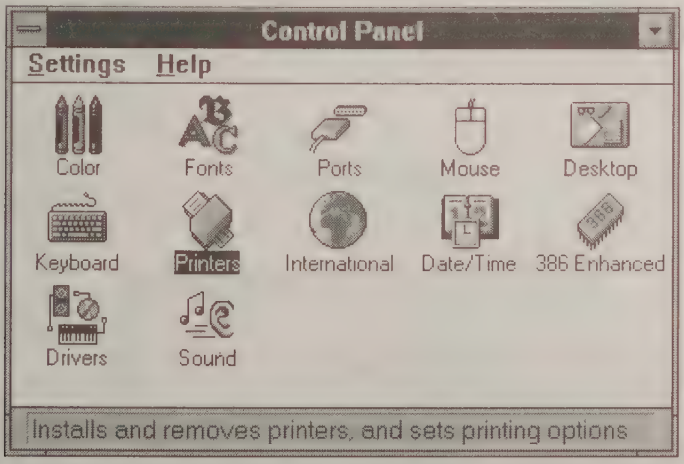
1. **Turn on the power of the computer and activate Microsoft Windows.**

2. **Open the MAIN window.**



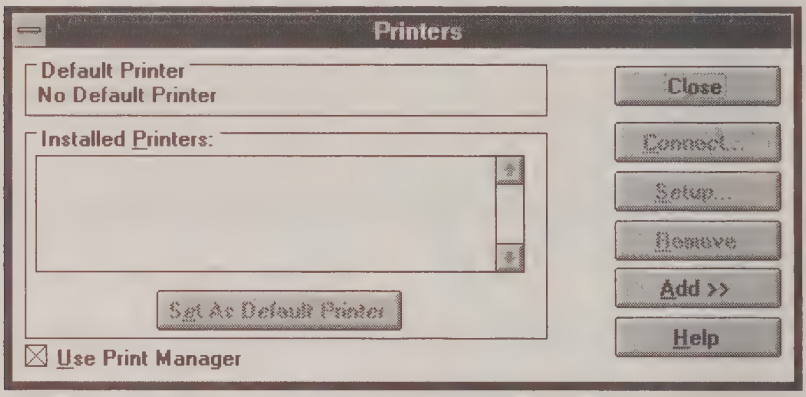

3. **Double-click the Control Panel icon in the MAIN window.**

   The Control Panel window will appear.



**4. Double-click the Printers icon in the Control Panel window.**

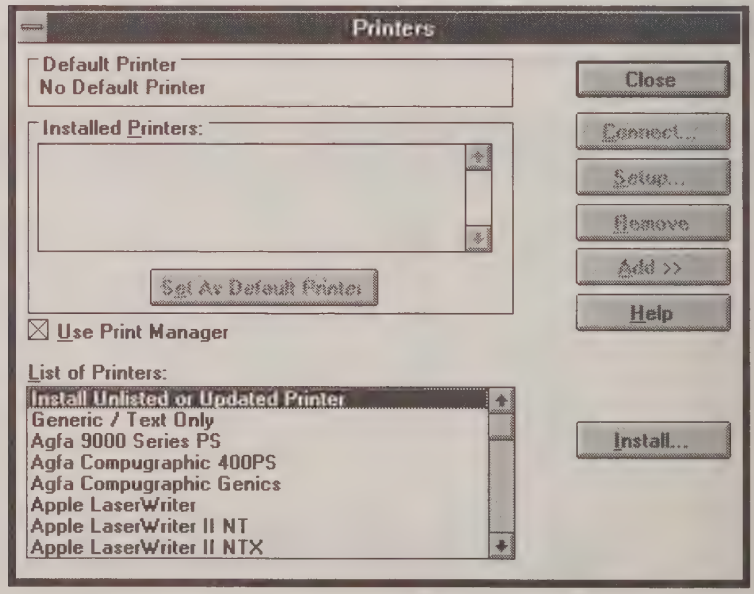
The Printers window will appear. (Available printer names will be listed in the List of Printers menu, if any.)




**5. Press "Add>>".**

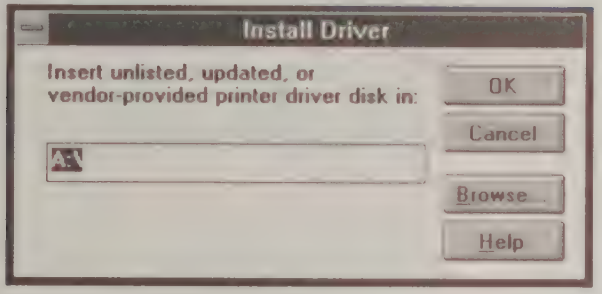
The Printers window will appear.

**Choose "Install Unlisted or Updated Printer" by highlighting.**



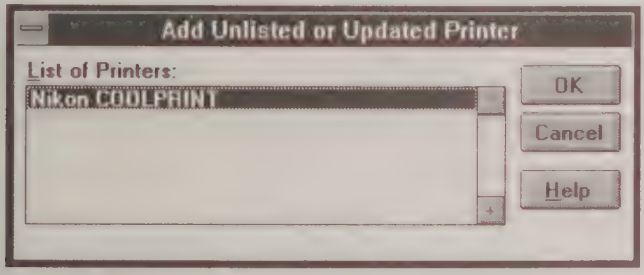
**6. Press "Install...".**

The Install Driver window will appear.



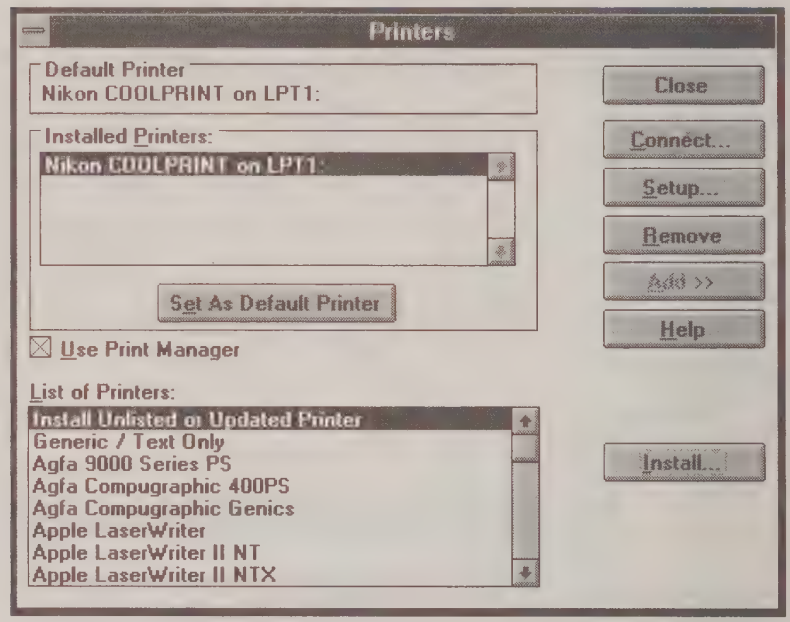

**7. Press "OK".**

The Add Unlisted or Updated Printer window will appear.



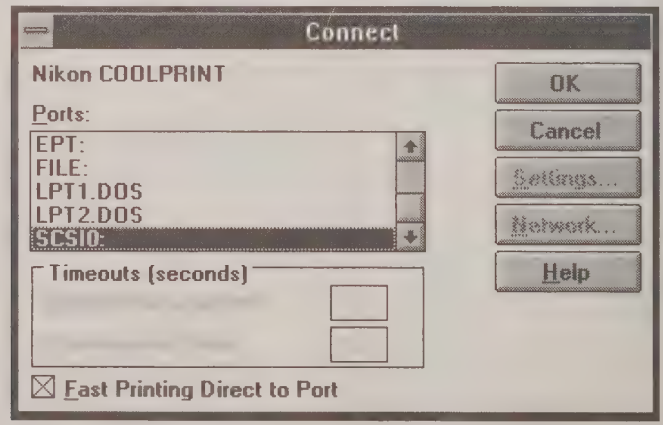
**8.** Press "OK".

The following window will appear.



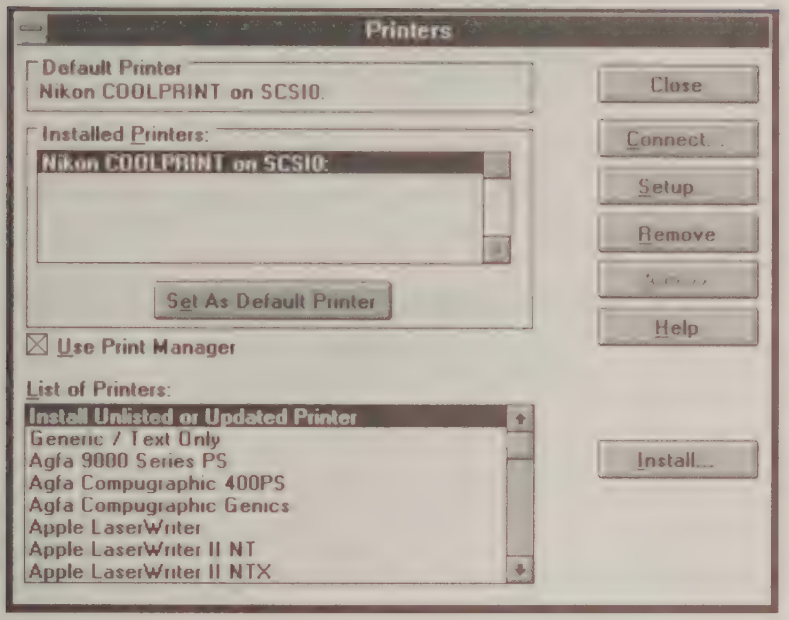

**9.** Press "Connect...".

The Connect window will appear.



**10.** Choose "SCSI0:" by highlighting, then press "OK".

The Printers window will appear.




**11.** If more than one printer is set in Installed Printer, highlight "Nikon COOLPRINT on SCSI0:" and then pick "Set As Default Printer".

**12.** Press "Close".

At this time, printer and port specification has been completed.

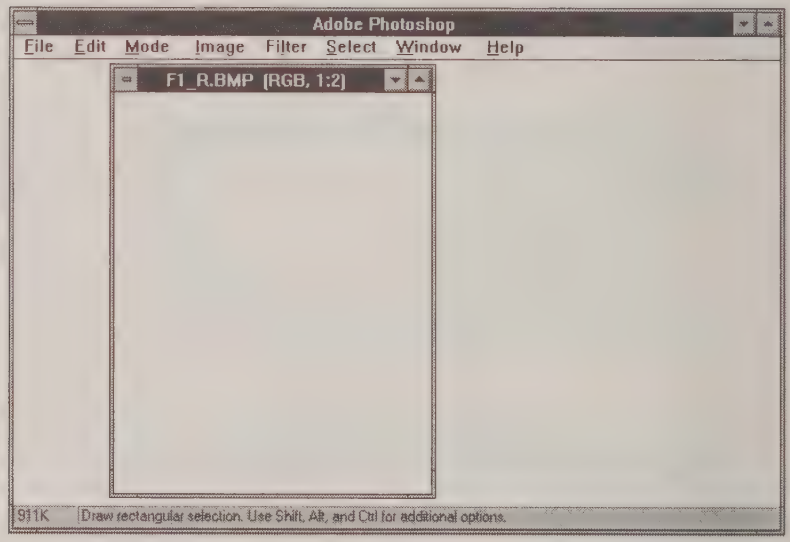
## B.3 Printing with Nikon COOLPRINT Driver

The following procedures are application-dependent and therefore may not be applicable as they are.

### Using the "Print" command

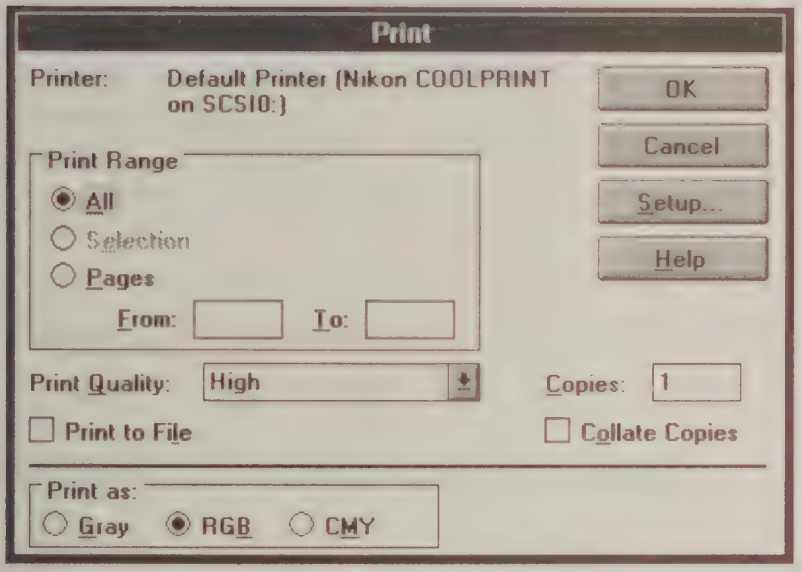
This section explains how to use the "Print" command.

**1. Activate the application software to print an image in COOLPRINT and open the image you want to print.**


Adobe Photoshop
File Edit Mode Image Filter Select Window Help
F1_R.BMP (RGB, 1:2)
911K
Draw rectangular selection. Use Shift, Alt, and Ctl for additional options.

**2. Choose the "Print" command from the File menu of the application software.**

The Print window will appear.




This window is application-dependent and therefore a window different from this may appear.

Items that can be set with this window are as follows: The setting of other items depends on the application used.

### Print range

Clicking "All" prints all the pages contained in the active image file.

To print only the pages desired, type the corresponding page numbers in the boxes of "From:" and "To:".

### Copies

Type the number of copies, 1 to 25, you want printed.

This window has the following buttons.

OK: Starts printing.

Cancel: Cancels the settings and closes the Print window.

Help: Help window will appear.

Setup: Pressing "Setup" brings up the Page Setup window. See the following section.

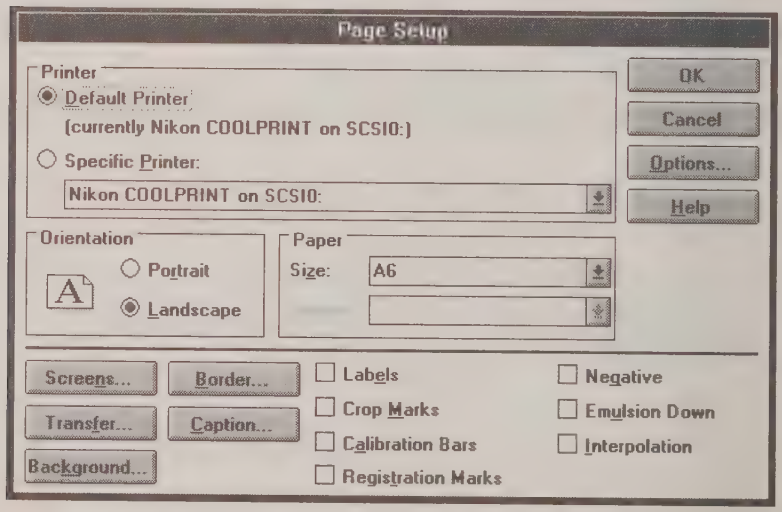
## Using the "Page Setup" command

This section explains how to use the "Page Setup" command. You can also open the Page Setup window by pressing "Setup" within the Print window.

1. **Activate the application software to print an image in COOLPRINT.**

2. **Choose the "Page Setup" command from the File menu of the application software for printing the image.**

   The Page Setup window will appear.




In the lower part of this window, application-dependent items may be displayed. Settings on these items are application-dependent.

Items that can be set with this window are:

### Printer

Click one of the following.

Default Printer: If printing operation goes to a Default Printer, click this button.

Specific Printer: To specify a printer, click this button and select the printer from the menu.

### Orientation

Select one of the following.

Portrait: Prints the image along the shorter side of the sheet.

Landscape: Prints the image along the longer side of the sheet.

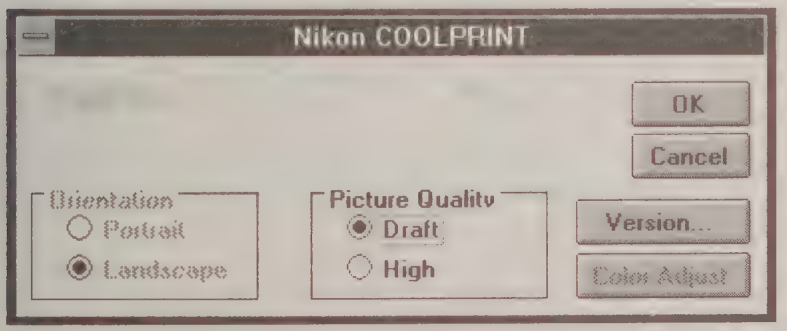
This window has the following buttons:

OK: Stores the settings and closes the Page Setup window.

Cancel: Cancels the settings and closes the Page Setup window.

Help: Help window will appear.

Options...: Pressing "Options..." brings up the Option window.



Items that can be set with this window are;

### Orientation*

Select one of the following.

Portrait: Prints the image along the shorter side of the sheet.

Landscape: Prints the image along the longer side of the sheet.

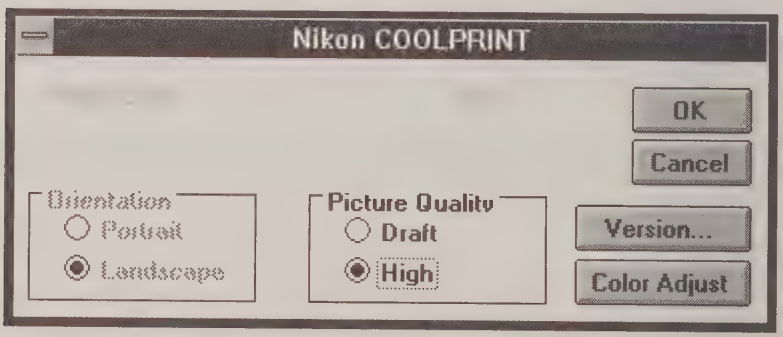
*If your application has this feature, the Orientation button in this dialog will be unselectable.

### Picture Quality

To choose either high speed printing or high quality printing, click one of the following:

Draft: Short processing time with sufficient image quality for normal use.

High: Makes the "Color Adjust" active. The processing time is longer but image quality is superior.




This window has the following buttons:

OK: Stores the settings and closes this window.

Cancel: Cancels the settings and closes this window.

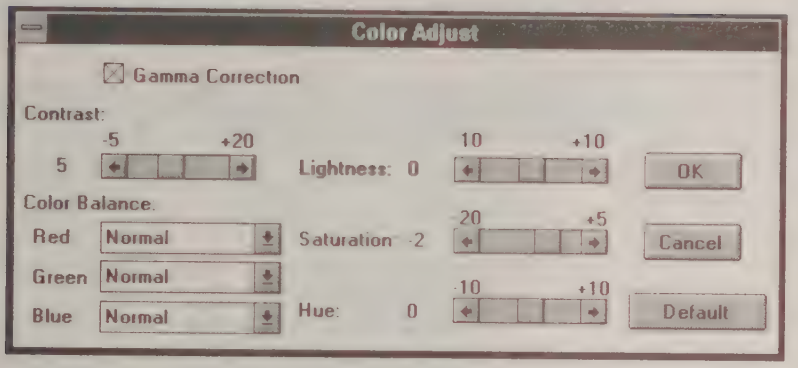
Version: Shows the version of the Printer Driver Software.

Color Adjust: Operates when the "High" is selected.

### Caution

Orientation set with Page Setup links to that of the Nikon COOLPRINT window. Therefore if you use an application that can change orientation with Page Setup, you need not change orientation within Nikon COOLPRINT.

Pressing "Color Adjust" brings up the following option window.




Items that can be set with this window are;

## Gamma correction

When this box has been checked, optional gamma correction can be performed. As a result, it is possible to print an image with almost the same contrast and color tone as the image which can be seen in the monitor setting used by ordinary users. The following items can be used to adjust the correction according to your preference. Clicking the "Default" with the box checked will return you to the initial state of gamma correction.

## Contrast

This is used to tune the contrast of an image. Click either the left or right arrow or drag the slider to change the value. Moving the slider to the right causes the contrast to become stronger and to the left weaker.

## Color Balance

Pull down the menu of Red, Green, and Blue, and specify the following Color Balance for each color.

- Much Emphasize
- Emphasize
- Normal
- Weaken
- Much Weaken

### Lightness

Adjust the lightness of an image. Moving the slider to the right causes the image to become brighter and to the left darker.

### Saturation

Adjust the saturation of an image. Moving the slider to the right causes the saturation to become greater (more vivid) and to the left smaller (less vivid).

### Hue

Adjust the hue of an image. Hue changes occur along the color circle as follows: Red <--> Yellow <--> Green <--> Cyan <--> Blue <--> Magenta <--> Red. Moving the slider to the right causes the hue to shift to the --> direction and to the left the <-- direction. The higher the number, the greater the change.

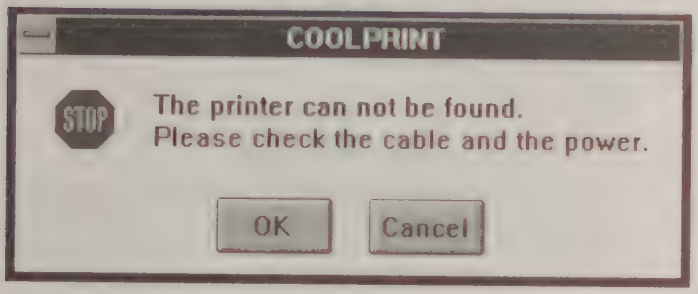
This window has the following buttons:

OK: Stores the settings and closes this window.

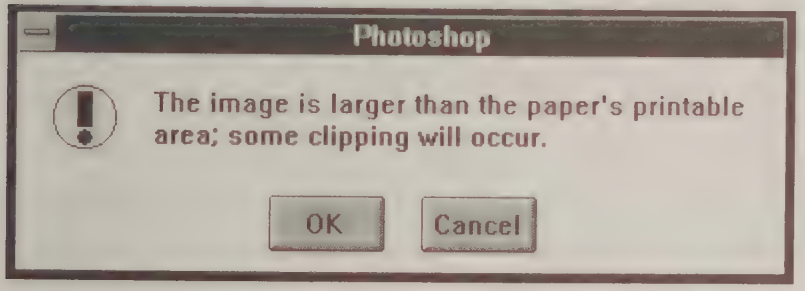
Cancel: Cancels the settings and closes this window.

Default: Returns all the settings to default.

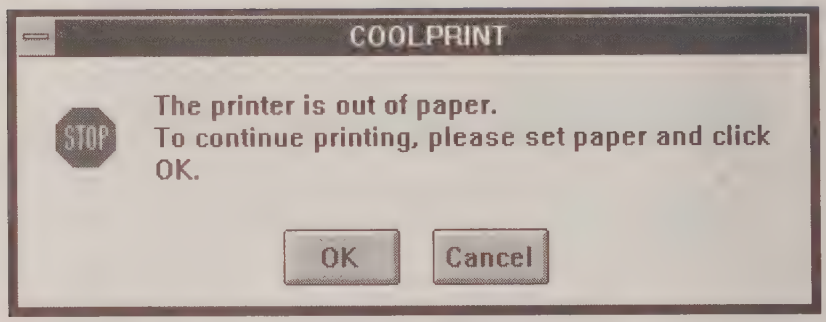
## B.4 Error messages and troubleshooting



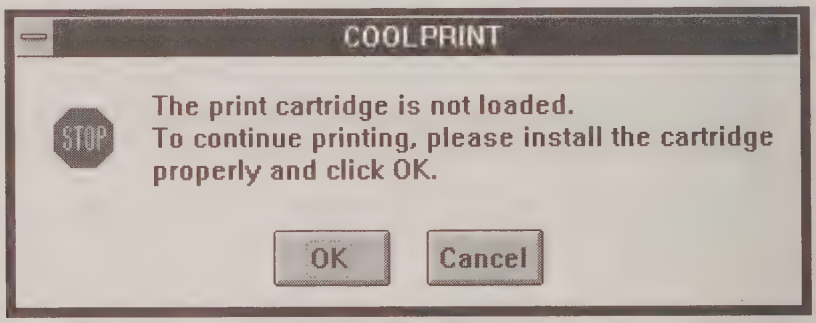

Is the printer powered on?
Is there any duplicating on SCSI ID number?
Is there any problem on termination?
Are SCSI cable and power cord connected correctly?



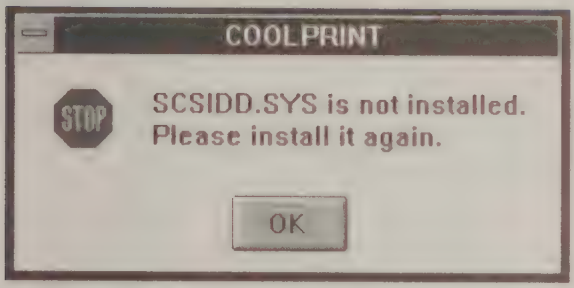

Confirm the resolution of image.
142dpi is recommended on COOLPRINT.
Change the resolution of image into 142dpi or set appropriate size by using your application.



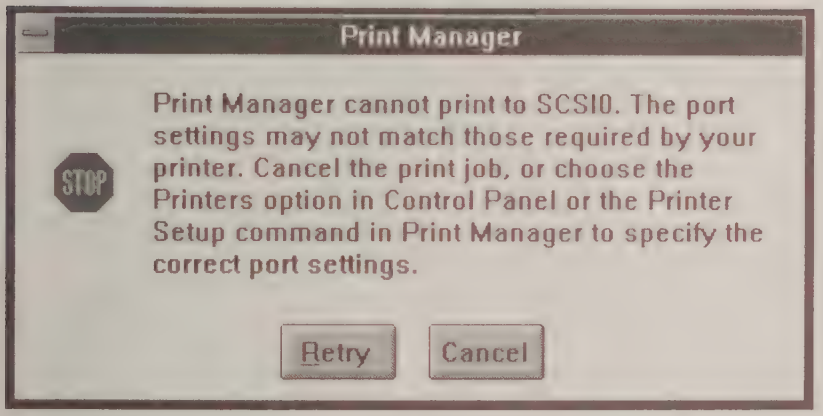

The VP print paper has run out.
If you want to continue printing, insert the VP print paper and press "OK."




The VP print cartridge is not loaded.
If you want to continue printing, insert the VP print cartridge and press "OK."




Are SCSIDD.SYS and ASPI Manager installed correctly ?
Install the COOLPRINT driver or set up the Host Adapter again


Print Manager
STOP
Print Manager cannot print to SCSI0. The port settings may not match those required by your printer. Cancel the print job, or choose the Printers option in Control Panel or the Printer Setup command in Print Manager to specify the correct port settings.
Retry
Cancel

Error might occurred on printing.
Is the printer powered on?
Is there any duplicating on SCSI ID number?
Is there any problem on termination?
Is an error code displayed on the 7-segment LED display?

# APPENDIX C Nikon COOLPRINT Macintosh Driver Software

The Nikon COOLPRINT Macintosh Driver Software is dedicated to Nikon COOLPRINT and enabled by selecting it from the Macintosh Chooser in the same way as for other printer drivers. Before installing it, please make a backup copy of the original disk.

This driver software can be installed very easily by using the installer contained on the enclosed disk.

You can print using the Nikon COOLPRINT Driver by selecting the driver and the printer from the Chooser window and making appropriate settings with the "Page Setup" and "Print" command, in the same way you would for other drivers.

### Note

You can only print in the foreground with this driver. After the image is transferred to the printer, the Macintosh will be freed up to continue with other tasks.

## C.1 System Requirements

Your Macintosh computer must satisfy the following conditions:

- System 7.1 or higher.
- A ColorSync Extension is required. (Nikon CMM and ColorSync Extension are on the installation disk.)
- 4MB or more RAM is required.
- 40MB or more hard disk capacity.

## C.2 Installing the Driver

Follow the steps below to install the driver onto your Macintosh computer. When the installation is completed, your Macintosh computer will restart. Therefore it is recommended that the driver be installed after closing other application software.

1. **Turn on your Macintosh.**

2. **Insert the disk titled "NIKON COOLPRINT Macintosh™ Driver Software" into the floppy disk drive.**

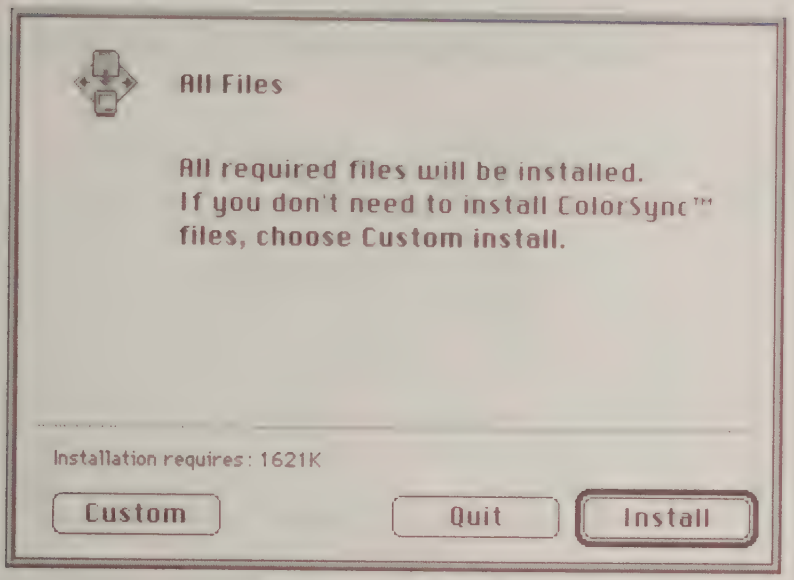
   The following window will appear.

3. **Double-click the Installer icon.**

   The following window will appear.

**4. Press "Continue".**

The following dialog will appear.

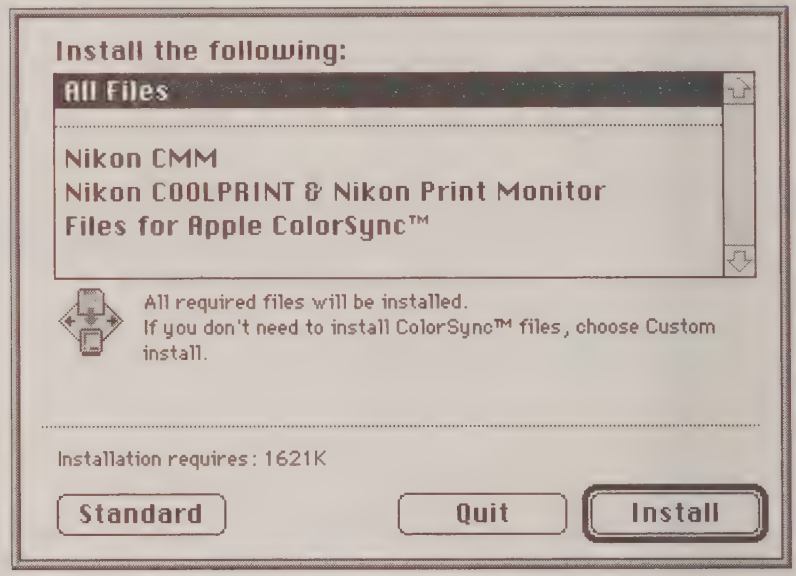



The Apple ColorSync Extension and the Nikon CMM enables more accurate color matching than the default provided by Apple Computer. If ColorSync Extension is already installed in your Macintosh, you can skip the installation of ColorSync by pressing "Custom" and proceed to Step 5.

If ColorSync is not installed in your Macintosh, press "Install" to install all files in the disk including ColorSync. Then proceed to Step 6.

Pressing "Quit" closes the dialog and cancels the installation procedure.

**5. If you press "Custom" in Step 4, the following dialog will appear.**



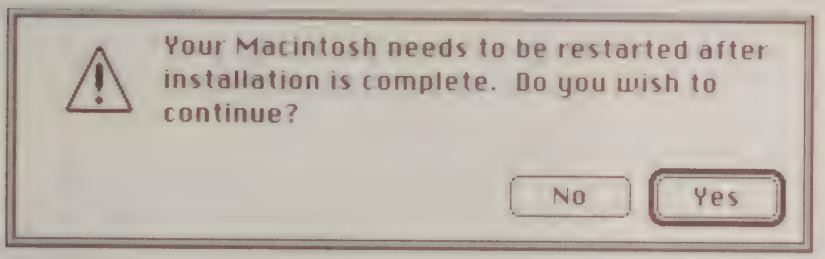

If you do not wish to install the Nikon CMM, choose "Nikon COOLPRINT & Nikon Print Monitor" from the list, then press "Install". In this case, however, ColorSync cannot be used for accurate color matching. If ColorSync Extension has been installed in your Macintosh computer, you need not select all of the ColorSync™ files.

Pressing "Install" after choosing "All Files" from the list installs all files including ColorSync, which is the same as pressing "Install" in Step 4. In this case, proceed to Step 6.

Pressing "Standard" returns you to Step 4.

Pressing "Quit" closes the dialog and cancels the installation procedure.

6. **When you start the installation procedure, the following dialog appears for confirmation.**

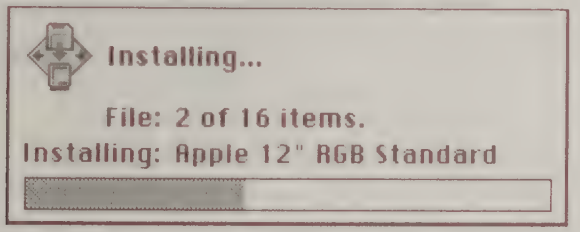



Pressing "Yes" starts installation.

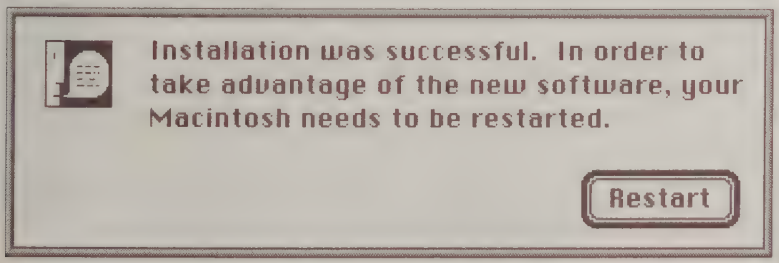
Pressing "No" causes the Step 4 or Step 5 dialog to appear.

7. **Installation starts.**

The status of installation progress is displayed during installation.




8. **When the installation is completed successfully, the following dialog will appear.**


Installation was successful. In order to take advantage of the new software, your Macintosh needs to be restarted.
Restart

Press "Restart" to restart your Macintosh. After it restarts, you can use the driver.

## C.3 Printing with Nikon COOLPRINT Driver

You can print using Nikon COOLPRINT Driver by selecting the driver from the Chooser window and making appropriate settings with the "Page Setup" and "Print" command, in the same way you would for other drivers.

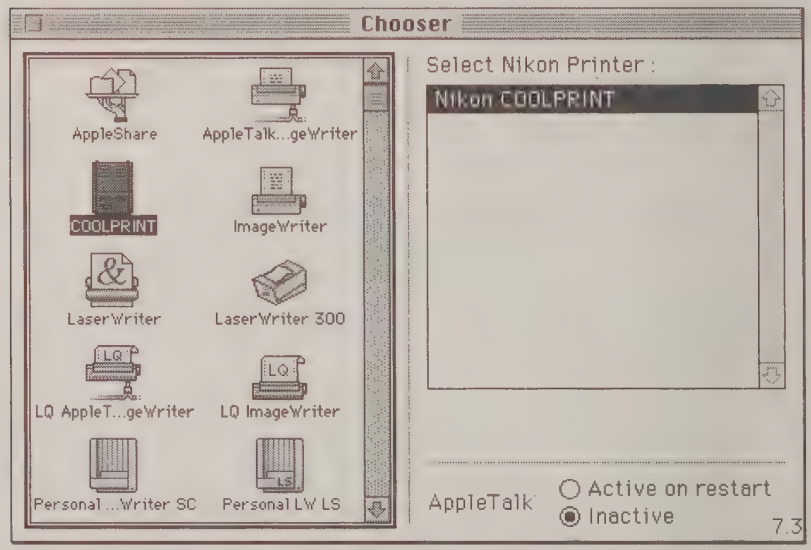
### Selecting the printer

Before printing with Nikon COOLPRINT Driver, you have to select a printer from Chooser in the Apple menu.

Follow the steps below to select a printer from Chooser.

1. **Select Chooser from the Apple menu.**

   The Chooser window will appear:




2. **Click the "COOLPRINT" icon from the box on the left and choose "Nikon COOLPRINT" from the list on the right.**

3. **Click the close box to close the window.**

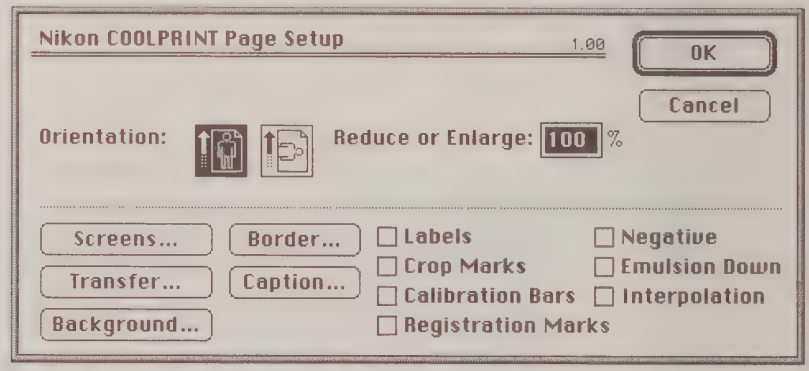
## Using the "Page Setup" command

This section explains how to use the "Page Setup" command.

1. **Activate the application software to print an image in COOLPRINT and open the image you want to print..**

**2. Choose the "Page Setup" command from the File menu of the application software for printing the image.**

The following dialog will appear.




In the lower part of this dialog, application-dependent items may be displayed. Settings on these items are application-dependent.

Items that can be set with this dialog are;

### Orientation

Select one of the following.

Portrait: Prints the image along the shorter side of the sheet.

Landscape: Prints the image along the longer side of the sheet.

### Reduce or Enlarge

Type in a reduction or enlargement ratio between 50% and 200%.

After confirming or changing the settings, press one of the following buttons.

OK: Stores the settings and closes the Page Setup dialog.

Cancel: Cancels the settings and closes the Page Setup dialog.

## Using the "Print..." command

This section explains how to use the "Print" command.

1. **Activate the application software to print an image in COOLPRINT and open the image you want to print.**

2. **Choose the "Print..." command from the File menu of the application software.**

   The following dialog will appear.

In the lower part of this dialog, application-dependent items may be displayed. Settings on these items are application-dependent.

Items that can be set with this dialog are;

### Pages

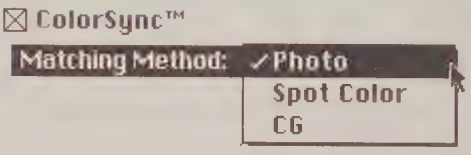
Clicking "All" prints all the pages contained in the active image file.

To print only the pages desired, type the corresponding page numbers in the boxes.

### Copies

Type the number of copies, 1 to 25, you want printed.

### ColorSync™ check box




Click this check box to enter a check mark.

ColorSync is available through ColorSync Extension. To effectively use this function, both Apple ColorSync and Nikon CMM must have been installed. Nikon CMM that comes with COOLPRINT will enable more accurate color matching than Apple CMM.

When the check mark is entered in the ColorSync check box, "Quality" and "Option" turn to gray indicating that they are inactive.

You can select the following options from the pull-down menu to the right of "Matching Method:"

Photo: Suitable for scanned photo images.

Spot Color: Suitable for color line drawings. It is adequate for an image which has few gradation, low saturation and few colors.

CG: Suitable for computer graphics

### Quality

To choose either high speed printing or high quality printing, click one of the following:

Draft: Short processing time with sufficient image quality for normal use.

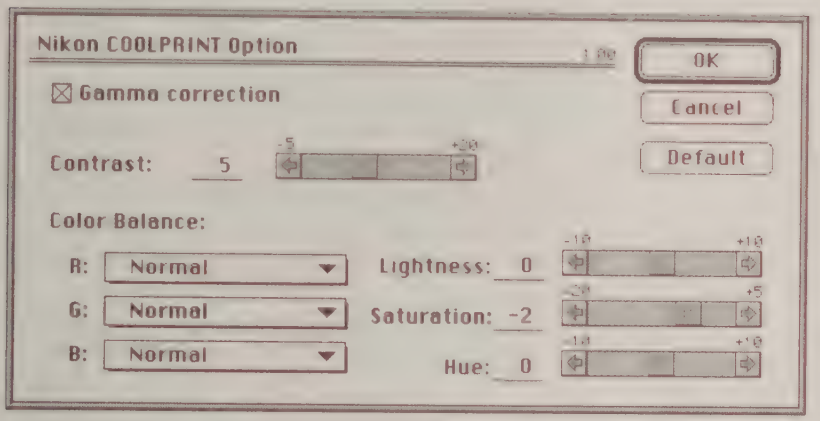
High: Makes the "Color Adjust" active. The processing time is longer but image quality is superior.

This dialog has the following buttons:

Print: Starts printing.

Cancel: Cancels the settings and closes the Print dialog.

Option: Operates when the "High" is selected. Pressing "Option" brings up the following option dialog.




Items that can be set with this dialog are;

### Gamma correction

When this box has been checked, optional gamma correction can be performed. As a result, it is possible to print an image with almost the same contrast and color tone as the image which can be seen in the monitor setting used by ordinary users. The following items can be used to adjust the correction according to your preference. Clicking the "Default" with the box checked will return you to the initial state of gamma correction.

### Contrast

This is used to tune the contrast of an image. Click either the left or right arrow or drag the slide bar to change the value. Moving the slide bar to the right causes the contrast to become stronger and to the left weaker.

### Color Balance

Pull down the menu of Red, Green, and Blue, and specify the following Color Balance for each color.

- Much Emphasize
- Emphasize
- Normal
- Weaken
- Much Weaken

### Lightness

Adjust the lightness of an image. Moving the slider to the right causes the image to become brighter and to the left darker.

### Saturation

Adjust the saturation of an image. Moving the slider to the right causes the saturation to become greater (more vivid) and to the left smaller (less vivid).

### Hue

Tunes the hue of an image. Hue changes occur along the color circle as follows: Red <--> Yellow <--> Green <--> Cyan <--> Blue <--> Magenta <--> Red. Moving the slider to the right causes the hue to shift to the --> direction and to the left the <-- direction. The higher the number, the greater the change.

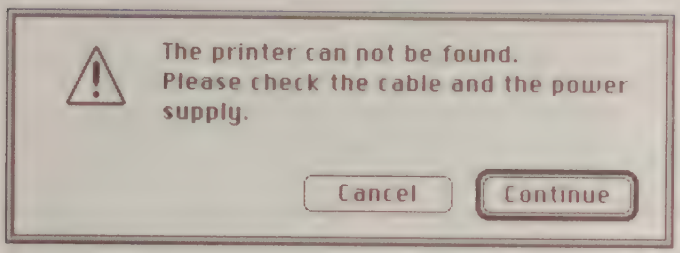
This dialog has the following buttons:

OK: Stores the settings and closes the option dialog.

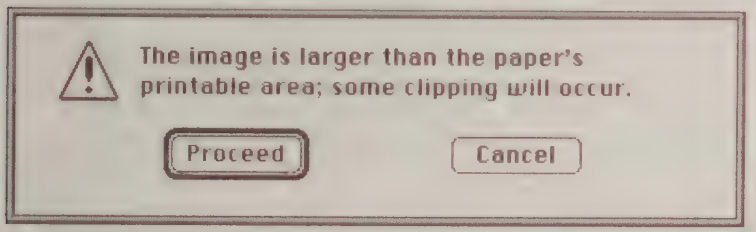
Cancel: Cancels the settings and closes the option dialog.

Default: Returns all the settings to default.

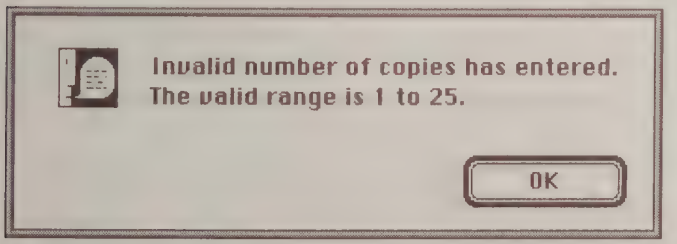
## C.4 Error messages and troubleshooting



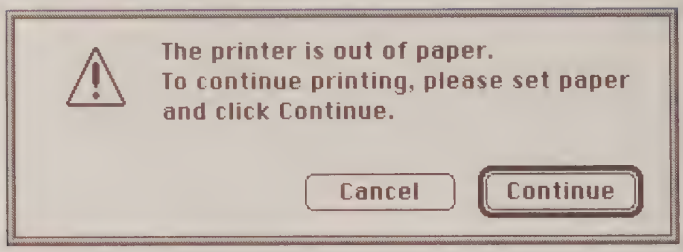

Is the printer powered on?
Is there any duplicating on SCSI ID number?
Is there any problem on termination?
Are SCSI cable and power cord connected correctly?




Confirm the resolution of image.
142dpi is recommended on COOLPRINT.
Change the resolution of image into 142dpi or set appropriate size by using "Reduce or Enlarge" in the page setup dialog.



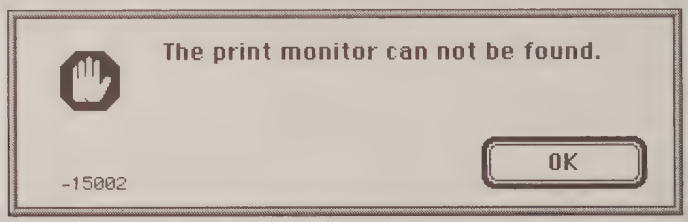

You can designate the number of copies from 1 to 25.
Enter adequate value again.




The VP print paper has run out.
If you want to continue printing, insert the VP print paper and press "Continue."

The print cartridge is not loaded.
To continue printing, please install the cartridge properly and click Continue.
Cancel
Continue

The VP print cartridge is not loaded.
If you want to continue printing, insert the VP print cartridge and press "Continue."




Is NIKON Print Monitor Driver Software installed in System Folder?
If not, install it again.

# APPENDIX D Troubleshooting

## Error Codes

If something wrong occurs in the unit, an error code is displayed on the 7 segment LED display, and error indicator is lit or flashing. When the indicator is lit, it indicates that the error cannot be corrected by the user. A flashing display indicates that the error can be fixed by the user.

If the Error indicator is lit, turn the power off and then on again. If the indicator still lights, contact Nikon service facilities for assistance.

| Error code | Cause and remedy |
|---|---|
| E1 | Make sure that the VP print paper is inserted in the paper tray. Make sure that the paper tray is inserted firmly into the place. |
| E2 | Make sure that the cartridge compartment lid is closed completely. Make sure that the VP print cartridge is loaded. Make sure that the ink ribbon has not worn out. Use the VP print cartridge recommended for this printer only. |
| E3 | Use the VP print cartridge and the VP print paper packed in the same carton. |
| E4 | Open the upper hatch. Remove the jammed paper and reinsert the paper tray. If the error code still appears on the 7-segment LED display, turn the power off. Then, the stored image sent from your computer and the setting of the number of copies will be missing. |
| E5 | Open the rear hatch and remove the jammed paper. If the error code still appears on the 7-segment LED display, turn the power off. Then, the stored image sent from your computer and the setting of the number of copies will be missing. |
| E6 | Too many prints are left in the paper outlet, which may cause a paper jam. Remove the prints. |
| E7 | The VP print cartridge malfunctions. Replace it with a new one. For how to replace it, refer to Chapter 3. |
| E8 | The VP print cartridge has failed during printing. If the failed VP print cartridge cannot be removed, contact a Nikon service facility for assistance. |

## If the paper jams

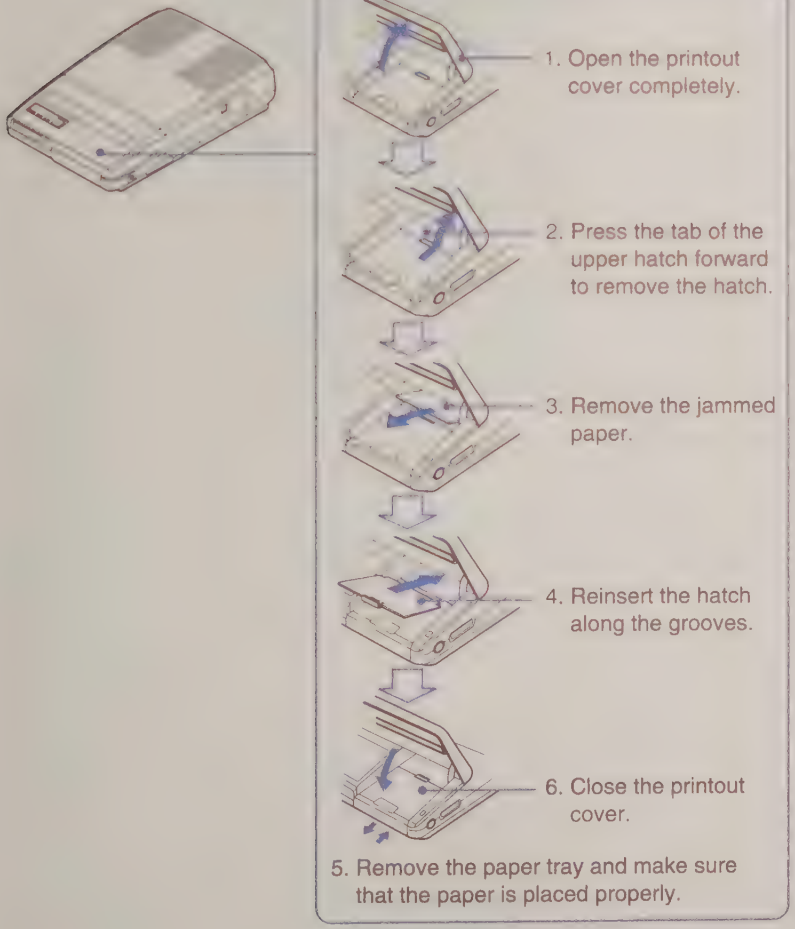
If the paper jams, the error code appears on the 7-segment LED display and printing stops. Remove the jammed paper according to the following procedures.

### Note

If the error code still appears on the 7-segment LED display after having removed the jammed paper, turn the power off and on again. If you cannot remove the jammed paper, contact Nikon service facilities for assistance.

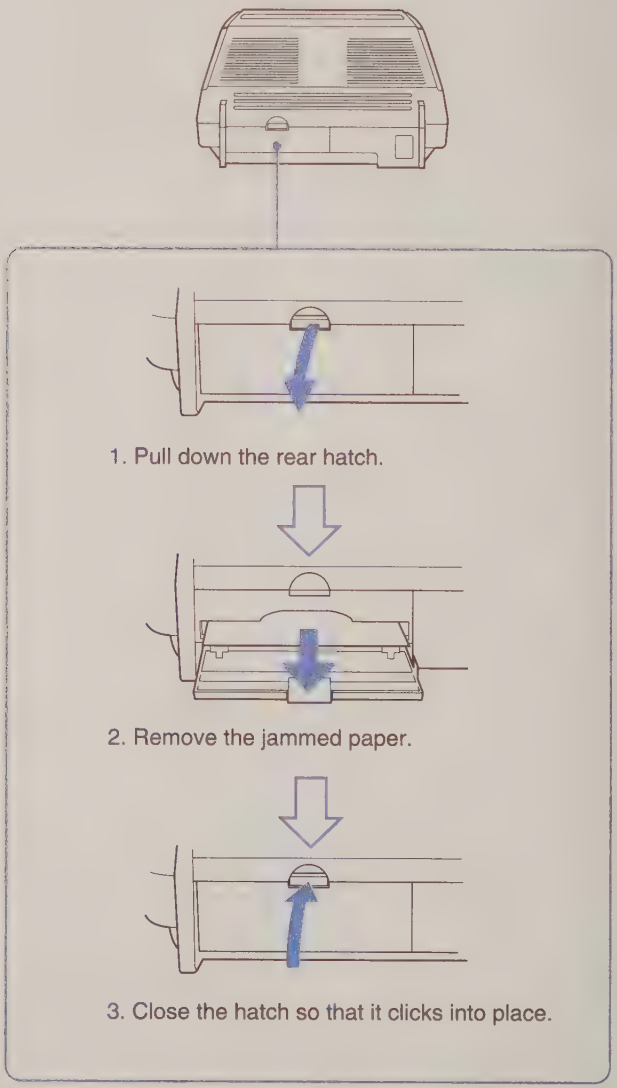
## If error code "E4" appears

Open the printout cover and remove the upper hatch. Remove the jammed paper. After that, remove the paper tray and make sure that the VP print paper is placed in the tray properly. Reinsert the tray into the paper compartment correctly.


1. Open the printout cover completely.
2. Press the tab of the upper hatch forward to remove the hatch.
3. Remove the jammed paper.
4. Reinsert the hatch along the grooves.
6. Close the printout cover.
5. Remove the paper tray and make sure that the paper is placed properly.

## If error code "E5" appears

Pull down the rear hatch and remove the jammed paper.



1. Pull down the rear hatch.

2. Remove the jammed paper.

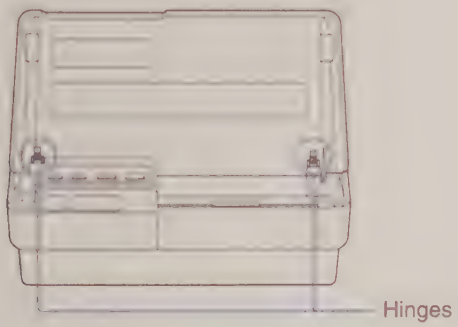
3. Close the hatch so that it clicks into place.

## If the paper outlet cover comes off

The printout cover may come off the unit if the cover is forced open or receives a strong impact.

If the cover has come off, insert the two hinges of the cover right down into the shaft.

(Note that if you try to insert the hinges with force or not directly downward, they may break.)



# APPENDIX E Specifications

| | |
|---|---|
| Print Method | Dye-Sublimation digital |
| Gradation | 256 gradations each for CMY - 16,700,000 colors |
| Resolution | 142dpi (5.6 dots/mm) |
| Number of picture elements | 488 x 637pixels |
| Printing size | 3.4 x 4.5inch (87.1 x 113.7mm) |
| Memory | One image (built-in print buffer) |
| Printing time | Approx. 60 seconds per sheet<br>(excluding data transfer time) |
| Interface | SCSI-II (50-pin half pitch connector x 1)<br>* Termination Power not supplied |
| Paper | VP Print Pack Standard NP-M100<br>VP Print Pack Sticker NP-S050 |
| Power requirements | AC 100–120V, 50/60Hz, 1.8A–1.5A |
| Dimensions (W/H/D) | 10.3 x 4.5 x 15.2inch (262 x 115 x 385mm)<br>* excluding protruding parts |
| Weight | Approx. 11.0lbs (5.0kg) |
| Operating temperature | 41˚F to 95˚F (5˚C to 35˚C) |
| Operating humidity | 20% to 80% (no condensation) |

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